

Drawing Index

These sheets are a document set and should not be separated. Electrical information and references are contained on all sheets.

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These drawings indicate the placement and interconnection of the listed equipment components. These drawings are not construction or site preparation drawings. Customer remains ultimately responsible for preparing the site to accommodate the operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

* REQUIRED REFERENCE *

Innova IGS
Pre Installation Manual
5421046-1-1EN

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the Pre Installation manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at:

www.gehealthcare.com/siteplanning

GE Healthcare



Interventional
Site Planning

CUSTOMER ACCEPTANCE



imagination at work

Customer Site Readiness
Requirements

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE Healthcare Installation Project Manager can supply a reference list of rigging contractors.
- New construction requires the following; 1. Secure area for equipment, 2. Power for drills and other test equipment, 3. Capability for image analysis, 4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- Contact a radiation physicist or consultant to specify radiation containment requirements.

GE Equipment Delivery
Requirements

The items on the GE Healthcare Site Readiness Checklist are REQUIRED to facilitate equipment delivery to the IS site. Equipment will not be delivered if these requirements are not satisfied.

GE Healthcare Site Readiness Checklist Rev 19					
Before using this document ensure you have the latest Rev from MyWorkshop on DOC0422752					
GEHC Global Order # : _____		Customer: _____			
GEHC PMI: _____		FE / Installer: _____			
The customer is responsible for proper site preparation regardless of any GEHC measurements/inspections/assessments.					
	Inspection Date:	Storage is ready?	PHI is ready?	FE is ready?	Comments
	GEHC Minimum Requirements				If "N", enter comments or action plan
1	MR Magnet Delivery Requirements: Ensure cryogen venting system is available for magnet connection as defined by GEHC Pre-Installation Manual (PIM) requirements, exhaust fan system is installed and operational, 480V power, and chilled water supply is available 24x7 that meets system cooling requirements. External connectivity is available for magnet monitoring and phone service is available during delivery. Surface mount vibromat installed where required. Magnet room final flooring is in place.				
2	MR RF Screen Room Requirements: RF Screen Room is tested with copy of Test Report, emailed to iSAdminCOEM@ge.com, that it is compliant with GEHC specifications. Dock Bolt and magnet anchors (if applicable) installed using 2 part anchor. For HDx systems, blower box mount bolts installed by RF vendor using 2 part anchors				
3	State Regulatory Requirements: Facility registration number provided for states of IL, KY, HI, RI, SC, TX, X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC, CO is WA.				
4	Site Drawing Requirements: Final version of equipment network and antenna, installation drawings (including red lined versions) verified to match actual room and has been provided to installer.				
5	Surface Penetration Requirements: Customer/Contractor scheduled to provide required drilling or cutting into floors, ceilings, and walls, OR surface penetration permit available and posted in the room when GEHC will perform the work.				
6	Pre-Delivery Route Requirements: The equipment delivery route from the truck to the final destination within the facility has been reviewed with all key stakeholders to safely meet the minimum requirements for equipment access, and all communications/notifications have occurred. Arrangements have been made for special handling (elevator, rigging, floor protection, fork lift, rollback truck, etc).				
7	Finished Room Requirements: Rooms that will contain equipment, including storage areas not in scan suite, are dust free. Provisions taken to maintain a dust free room. Precautions must be taken to prevent dust from entering rooms containing equipment when construction is incomplete in adjacent areas. All walls primed (final coat not needed on Day 1). Shielding, doors, and windows are to be installed. No contractor work being done during or after the installation that will cause dust in the installation areas or potential equipment damage. Room security to prevent unauthorized access and theft has been discussed with customer. The customer is aware of these security issues, implications and responsibility. For Storage: Room must meet PIM requirements for storage.				
8	Electrical Requirements: Lockable (LOTO) Main Disconnect Panel (MDP) is installed per GE guidelines and system power is available. Conduits, electrical cable ducting/dividers/cable trays, and access flooring is installed in proper location and height. Surface floor duct and load-side wires can be installed at time of system installation. Validate outlet location and requirements meet specifications for device/equipment.				
9	HVAC Requirements: The HVAC/Chilled Water systems designed to maintain the environment per spec/PIM is at running state and appears to provide the desired environmental conditions including location of vents, temperature and humidity for system operation.				
10	Flooring Requirements: Floor is clean and prepared for final floor covering. Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Confirm customer anchoring plan aligns with designed floor thickness. Final flooring installed where required for network racks.				
11	Ceiling Requirements: Unistrut (or equivalent) location, levelness and spacing is measured (or vendor confirmed) and consistent with the requirement of the installation drawings. Ensure unistrut and rails are not used as mounting surfaces. Ceiling grid is installed. Permanent lighting is installed and operational. HVAC diffusers are installed and connected to ductwork. Ceiling tiles installed per PMI discretion.				
12	Staging Requirements: Space has been identified to support the active installation process only. This area meets PIM/project book requirements Storage space has been identified, if needed. This secured space would be used to store equipment indefinitely. If offsite, transportation plan has been developed at customer expense. This space must meet PIM requirements.				
13	Network Connectivity: Hardware for network connectivity(network drop) is in place prior to delivery with specified network firewall configuration where required. Site Surveys for wireless mobile XR units have been completed.				
14	Medical Gases Requirements: Systems (hard piped or portable) in place to allow testing and calibration of equipment (anesthesia), including ventilation.				

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin
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SHEET TITLE: SITE READINESS

MODALITY TYPE: INNOVA IGS 520

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS, IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE LATEST REVISED GEHC PIM. THE CUSTOMER SHALL BE RESPONSIBLE FOR ACTUAL CONSTRUCTION. GEHC DOES NOT ACCEPT ANY LIABILITY OR RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
142089	00
DATE: 01Jul.14	
DRAWN BY: REK	
CHECKED BY: LLM	
QT. NO: PR11C14447V4	
QT. DT: 25Jun.14	

REVISION HISTORY:	

SHEET

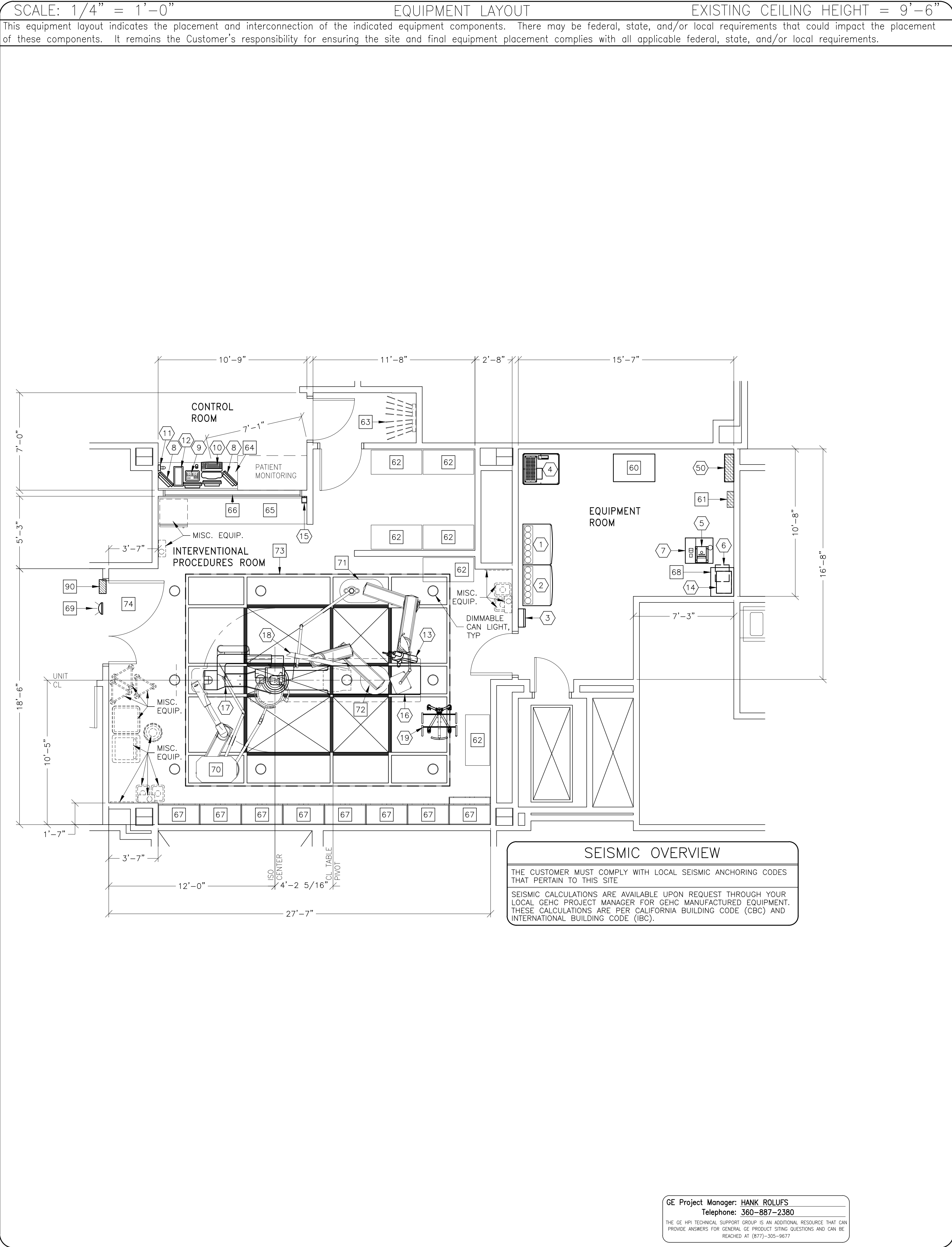
C1

This drawing is based on Sketch No.: 14NWT270

PIM R2

RQ – 144741

GE EQUIPMENT LISTING								
EQUIPMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, PER QUOTE PR11-C14447V4 DATED 25Jun.14					EQUIPMENT CROSS REFERENCE CHART			
NOTE: LOCAL CONDITIONS MAY DICTATE THAT ITEMS IDENTIFIED IN THIS CATEGORY BE INSTALLED BY OTHERS.					SEISMIC STATUS	P = PREAPPROVAL C = CALCULATIONS/ PENDING APPROVAL S = SPECIFICATIONS ONLY		
ITEM NO.	QUANTITY ORDERED	REFER TO SHEET "D"		DETAIL NO.	STRC PLAN	ELEC PLAN		
		ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)				
(1)	1	ATLAS CABINET <C1>	1115 lbs	3389 btu	B0558C	S100	C1	
(2)	1	ATLAS CABINET <C2>	659 lbs	1825 btu	B0558C	S100	C2	
(3)	1	UPS INTERFACE BOX			E45021B		UIB	
(4)	1	UPS CABINET	1170 lbs	4061 btu	E45025C	--	UPS	
(5)	1	DETECTOR CHILLER	33 lbs	706 btu	B5049F	---	DC	
(6)	1	COOLIX 4100 AUTOTRANSFORMER	66 lbs	153 btu	B-1GS05	--	AT	
(7)	1	COOLIX 4100 WATER CHILLER	264 lbs	11737 btu	B-1GS03 B-1GS04	--	CHLR	
(8)	2	19 in. MONITOR ON DESK	17 lbs	204 btu	C7619D	---	WBM2	
(9)	1	CONTROL ROOM MONITOR WITH DL KEYPAD	22 lbs	204 btu	C7412H C7619D	---		
(10)	1	OPERATORS CONSOLE	22 lbs	546 btu	B5050C C7502 C7619D	--	WBC1	
(11)	1	BOLUS CHASE HANDSWITCH	2 lbs			---	WBBC	
(12)	1	REMOTE CONTROL FOR INJECTOR	4 lbs		B5028	--	IEC	
(13)	1	INJECTOR HEAD ON TABLE RAIL	15 lbs		B5030A	---	IH	
(14)	1	INJECTOR ELECTRONICS	37 lbs	320 btu	B5028	---	IE	
(15)	1	XR BUZZER <LOCATED ABOVE CEILING>	2 lbs		B5150H	---	XRIB	
(16)	1	INNOVA IQ TABLE	1750 lbs	614 btu	B8162	B5049N	LUS	
(17)	1	INNOVA POSITIONER <REFERENCE TABLE BASE-PLATE DETAIL FOR FLOOR MOUNTING INFORMATION>	1653 lbs	2416 btu	B5050A B5050B B5050 B5050C B5050F B5050G B5050H B5050J B5050P B5050R	--	LC1	
(18)	1	TWO LCD MONITORS ON VENDOR BOOM <MONITORS ARE TO BE USED AS THE MAIN MONITORING SYSTEM>		409 btu		---	WBM1	
(19)	1	TABLESIDE CART			B-1GS06	--		
THE FOLLOWING ITEMS, WHICH HAVE BEEN ORDERED FROM GE HEALTHCARE, ARE TO BE INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.								
(59)	1	INNOVA MAIN DISCONNECT, REFERENCE JUNCTION POINT "PDB" ON SHEET E1 FOR DETAILED DESCRIPTION.	326 lbs	1532 btu	E4502M	---	PDB	



ANCILLARY ITEMS	
CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS	
ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
60	CUSTOMER SUPPLIED STORAGE CABINET
61	150-AMP LOCAL SERVICE DISCONNECT FOR LOCK-OUT/TAG-OUT CAPABILITY. <MAY BE A FUSED DISCONNECT, CIRCUIT BREAKER OR SAFETY SWITCH.>
62	*CABINET
63	*LEAD APRON RACK
64	*COUNTER TOP FOR EQUIPMENT
65	*COUNTER TOP WITH BASE CABINETS
66	*FULL CONTROL WALL WITH LEAD GLASS VIEWING WINDOW
67	*CATHETER CABINETS
68	SHELF - CUSTOMER TO PROVIDE ADEQUATE WALL SUPPORT
69	X-RAY ON WARNING LIGHT - AVAILABLE FROM GE SUPPLY CALL: 800-200-9760 GE CAT. NO. WX1ABW-DF-XIU
70	VENDOR EQUIPMENT BOOM WITH SURGICAL LAMP
71	VENDOR BOOM WITH RAD SHIELD
72	VENDOR BOOM WITH 2 MONITORS
73	LAMINAR AIR-FLOW AREA IN CEILING
74	MINIMUM DOOR OPENING FOR EQUIPMENT DELIVERY IS 44 IN. W X 82 IN. H (1118mm X 2083mm). CONTINGENT ON A 96 IN. (2438mm) CORRIDOR WIDTH
THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.	
90	X-RAY ROOM WARNING LIGHT/ROOM LIGHTING CONTROL PANEL REFERENCE JUNCTION POINT "XRLC" ON SHEET E1 FOR DETAILED DESCRIPTION -CAT. NO. E4502SS FOR WARNING LIGHT & ROOM LIGHT CONTROL.
GENERAL SPECIFICATIONS	
<ul style="list-style-type: none">THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC SPECIALIST REGARDING ACCEPTABILITY OF OTHER CEILING HEIGHTS.CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY WILL ACCOMMODATE THE EQUIPMENT AS SHIPPED.RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST.THE DEVELOPMENT OF THE EQUIPMENT LAYOUT, ROOM DIMENSIONS, MECHANICAL AND ELECTRICAL SUGGESTIONS IS PREDICATED UPON THE BEST INFORMATION OBTAINABLE FROM THE SITE, COUPLED WITH THE CUSTOMER'S KNOWN DESIRES. ARCHITECTURAL OR ELECTRICAL CHANGES INCLUDING RELOCATION OF EQUIPMENT ILLUSTRATED ON THIS DRAWING IS ALLOWED ONLY WITH NOTIFICATION, IN WRITING, AND REVIEW BY GEHC SERVICE DEPARTMENT. EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC. MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE ON THE JOB CHANGES BECAUSE OF CUSTOMER REQUIREMENTS AND/OR OBSTACLES IN CONSTRUCTION, ETC..ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES.DIMENSIONS ARE TO FINISHED SURFACES OF ROOM	
SITE ENVIRONMENT SPECIFICATIONS	
<ul style="list-style-type: none">AMBIENT OPERATING TEMPERATURE: EQUIPMENT ROOM WITH FLUORO UPS OPTION 68° TO 77° F. (20° TO 25° C)AMBIENT OPERATING TEMPERATURE: CONTROL ROOM 68° TO 77° F. (20° TO 25° C)AMBIENT OPERATING TEMPERATURE: EXAM ROOM-DESIGN FOR PATIENT/OPERATOR COMFORT TARGET TEMPERATURE 64° F (18° C)HUMIDITY: 30° TO 75° FOR EQUIPMENT AND CONTROL ROOMS AND 30° TO 70° FOR EXAM ROOMALTITUDE: NOT TO EXCEED 9,842 FT. (3000M) ABOVE SEA LEVEL.THE ENVIRONMENT FOR THE ELECTRONICS CABINET MUST BE CONTROLLED SO THE ABOVE RESTRICTIONS ARE NOT EXCEEDED.DO NOT RESTRICT THE AIR INTAKE OR AIR EXHAUST OF THE SYSTEM COMPONENTS.ENVIRONMENTAL CONDITIONS LISTED ABOVE MUST BE MAINTAINED AT ALL TIMES INCLUDING FOR EXAMPLE OVERNIGHT, WEEKENDS, AND HOLIDAYS.	
MAGNETIC INTERFERENCE SPECIFICATIONS	
<p>DIGITAL FLAT PANEL MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 1 GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE.</p> <p>X-RAY TUBES MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE SPECIFIED PERFORMANCE.</p> <p>SYSTEM ELECTRONICS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE DATA INTEGRITY.</p> <p>OPERATORS CONSOLE EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.</p>	

GE Healthcare

Healthcare Project Implementation - Design Center

Minneapolis, Minnesota

EQUIPMENT LAYOUT

MODALITY TYPE: INNOVA ICS 520

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V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT TITLE:

PROJECT NO. 144741

PROJECT REVISION

142089 00

DATE: 01.Jul.14

DRAWN BY: REK

CHECKED BY: LLM

QT. NO: PR11C14447V4

QT. DT: 25Jun.14

REVISION HISTORY:

SHEET

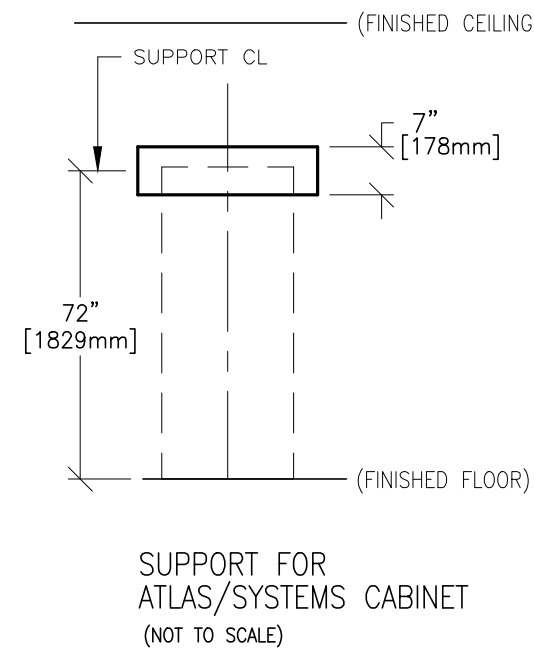
A1

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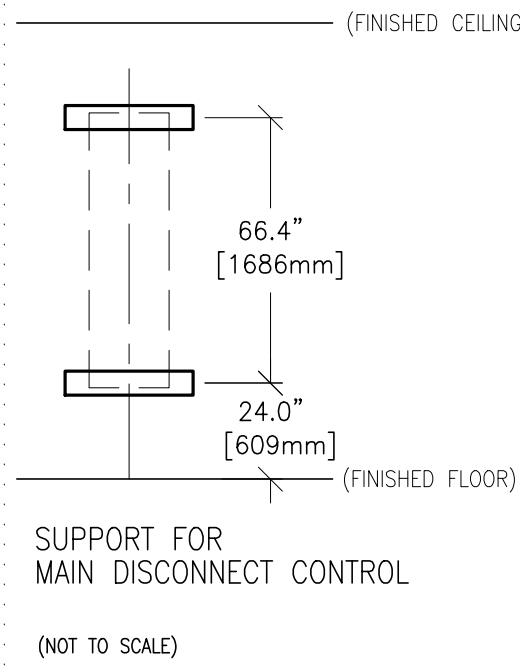
472-303

TYPICAL WALL SUPPORT ELEVATIONS

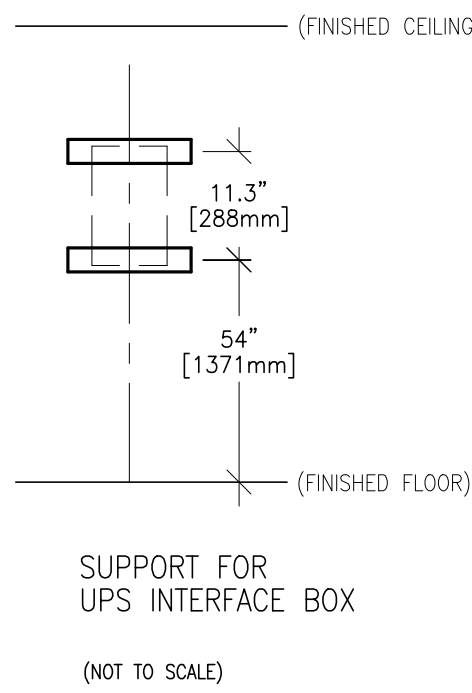
S100



S107



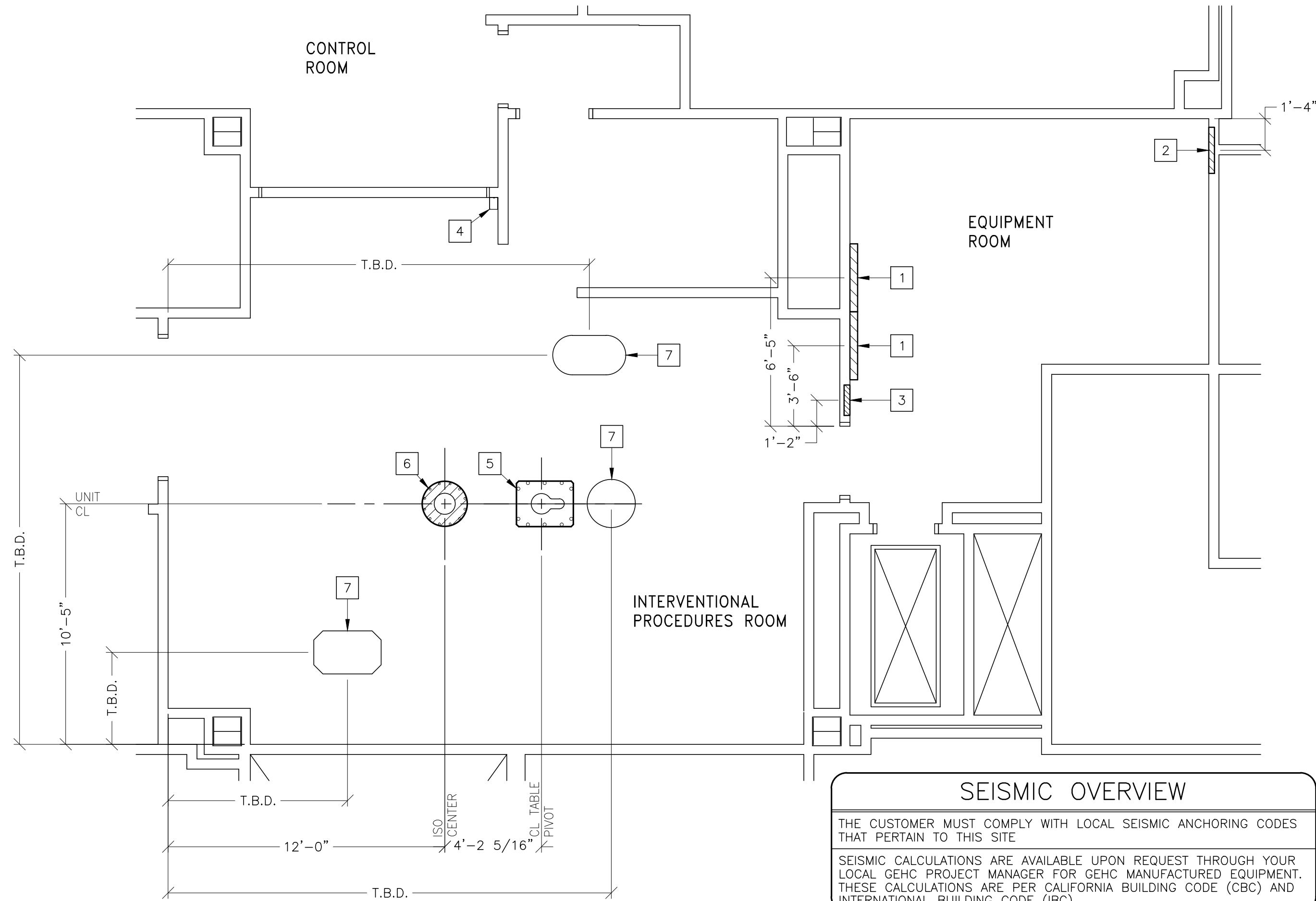
S115



SCALE: 1/4" = 1'-0"

STRUCTURAL LAYOUT

EXISTING CEILING HEIGHT = 9'-6"



SEISMIC OVERVIEW

THE CUSTOMER MUST COMPLY WITH LOCAL SEISMIC ANCHORING CODES THAT PERTAIN TO THIS SITE.

SEISMIC CALCULATIONS ARE AVAILABLE UPON REQUEST THROUGH YOUR LOCAL GEHC PROJECT MANAGER FOR GEHC MANUFACTURED EQUIPMENT. THESE CALCULATIONS ARE PER CALIFORNIA BUILDING CODE (CBC) AND INTERNATIONAL BUILDING CODE (IBC).

GE Project Manager: HANK ROLUFS
Telephone: 360-887-2380

THE GE HR TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SIZING QUESTIONS AND CAN BE REACHED AT (877)-305-9677

STRUCTURAL SUPPORT METHODS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
1	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S100, FOR ATLAS CABINET.
2	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S107, FOR MAIN DISCONNECT CONTROL.
3	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S115, FOR UPS INTERFACE BOX.
4	MOUNT XR BUZZER BRACKET ON WALL, ABOVE CEILING
5	AREA OCCUPIED BY GE SUPPLIED TABLE BASEPLATE
6	AREA OCCUPIED BY GE SUPPLIED POSITIONER BASEPLATE
7	AREA OCCUPIED BY CUSTOMER SUPPLIED BDDM SUPPORTS

STRUCTURAL NOTES

- ALL STEEL WORK AND PARTS NECESSARY TO SUPPORT CEILING MOUNTED TUBE HANGER OR OTHER EQUIPMENT ARE TO BE SUPPLIED BY THE CUSTOMER OR HIS CONTRACTORS. THE UNISTRUT OR EQUIVALENT STRUCTURE SHOULD RUN CONTINUOUS WITH NO FITTINGS EXTENDING BELOW FACE OF UNISTRUT CHANNEL, RUN WALL TO WALL, BE PARALLEL, SQUARE AND IN THE SAME HORIZONTAL PLANE FLUSH WITH FINISHED CEILING. THE SYSTEM IS TO BE CROSS BRACED VERTICALLY, HORIZONTALLY AND DIAGONALLY TO ALLOW NO MOVEMENT AND A MAXIMUM OF 1,58mm (1/16") DEFLECTION. CLOSURE STRIPS SHALL BE PROVIDED FOR AREAS OF UNISTRUT EXPOSED AND WITHOUT MOUNTING UNITS.
- METHODS OF SUPPORT FOR THE STEELWORK THAT WILL PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE CONSTRUCTION SHOULD BE FAVORED. DO NOT USE CONCRETE OR MASONRY ANCHORS IN DIRECT TENSION.
- ALL UNITS THAT ARE WALL MOUNTED OR WALL SUPPORTED ARE TO BE PROVIDED WITH SUPPORTS WHERE NECESSARY. WALL SUPPORTS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTORS. SEE PLAN AND DETAIL SHEETS FOR SUGGESTED LOCATIONS AND MOUNTING HOLE LOCATIONS.
- ALL CEILING MOUNTED FIXTURES, AIR VENTS, SPRINKLERS, ETC. TO BE FLUSH MOUNTED, OR SHALL NOT EXTEND MORE THAN 6,35mm (1/4") BELOW THE FINISHED CEILING.
- CONTROL WALLS WITH TUBE HANGER PASSAGE ABOVE SHALL BE CONSTRUCTED TO 2130mm (7'-0") HIGH.
- FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO 3,17mm (1/8") in 3050mm (10'-0")
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM.
- CUSTOMERS CONTRACTOR MUST PROVIDE ALL PENETRATIONS IN POST TENSION FLOORS.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL ANY NON-STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR GEOGRAPHIC AREAS THAT REQUIRE SUCH DOCUMENTATION.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL HARDWARE FOR "THROUGH THE FLOOR" ANCHORING AND/OR ANY BRACING UNDER ACCESS FLOORS. THIS CONTRACTOR MUST ALSO PROVIDE FLOOR DRILLING THAT CANNOT BE COMPLETED BECAUSE OF AN OBSTRUCTION ENCOUNTERED WHILE DRILLING BY THE GE INSTALLER SUCH AS REBAR ETC.
- IT IS THE CUSTOMER'S RESPONSIBILITY TO PERFORM ANY FLOOR OR WALL PENETRATIONS THAT MAY BE REQUIRED. THE CUSTOMER IS ALSO RESPONSIBLE FOR ENSURING THAT NO SUBSURFACE UTILITIES (E.G., ELECTRICAL OR ANY OTHER FORM OF WIRING, CONDUITS, PIPING, DUCT WORK OR STRUCTURAL SUPPORTS (I.E. POST TENSION CABLES OR REBAR)) WILL INTERFERE OR COME IN CONTACT WITH SUBSURFACE PENETRATION OPERATIONS (E.G. DRILLING AND INSTALLATION OF ANCHORS/SCREWS) PERFORMED DURING THE INSTALLATION PROCESS. TO ENSURE WORKER SAFETY, GE INSTALLERS WILL PERFORM SURFACE PENETRATION OPERATIONS ONLY AFTER THE CUSTOMER'S VALIDATION AND COMPLETION OF THE "GE SURFACE PENETRATION PERMIT"

SHEET TITLE: STRUCTURAL LAYOUT

MODALITY TYPE: INNOVA ICS 520

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V A PALO ALTO

PALO ALTO, CALIFORNIA

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142089	00
DATE:	01.Jul.14
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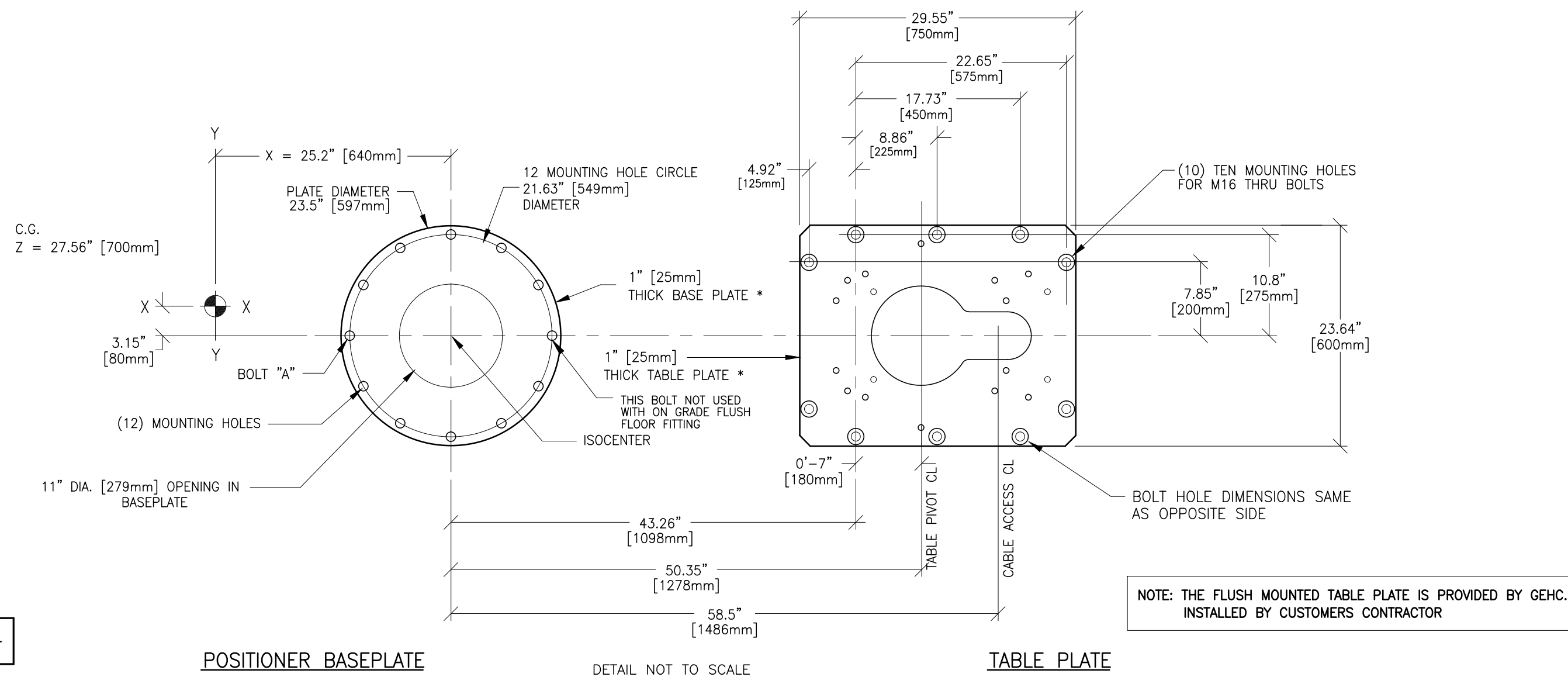
S1

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

FLOOR MOUNTING : INNOVA 2100-3100-4100 (UNITY)/OMEGA V LONG TABLE (WITH IQ TILT TABLE BASEPLATE) INSTALLATION (TEMPLATE NO. 2360133)

B5049N

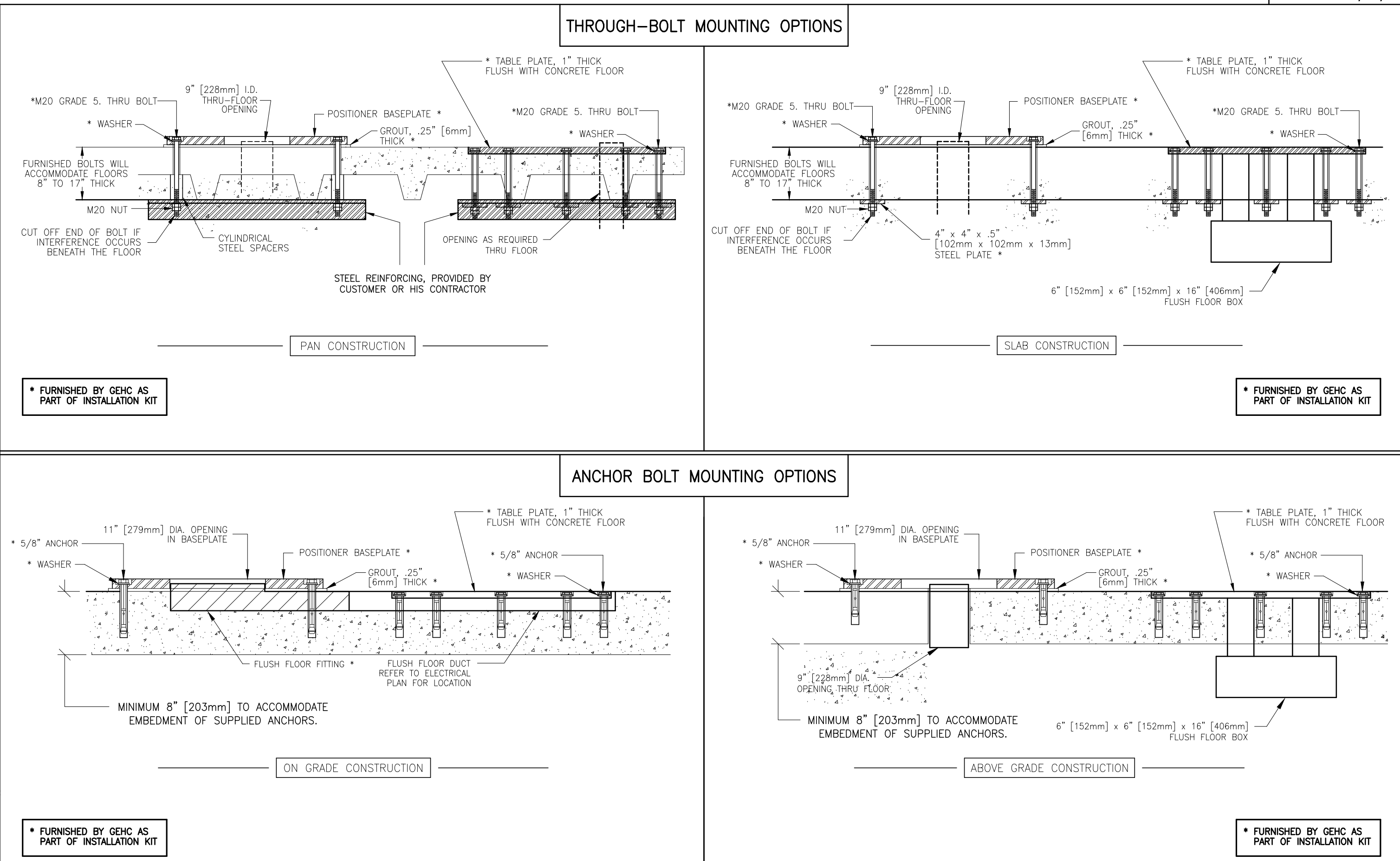
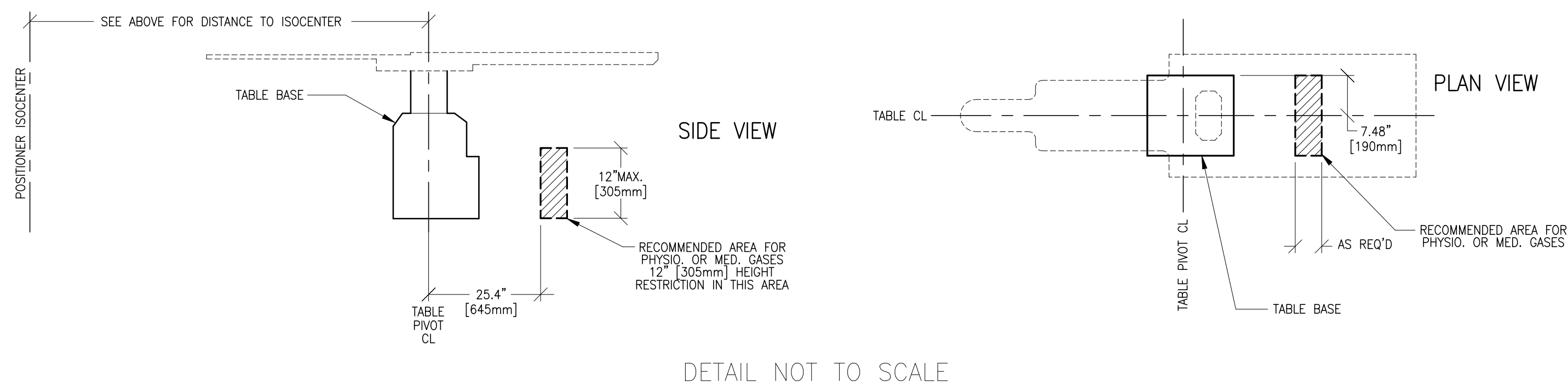
REV. DATE: 06/04/09



WARNING!! THE RELATIONSHIP BETWEEN THE TABLE BASE AND THE POSITIONER BASEPLATE IS CRITICAL.

PRIOR TO DRILLING MOUNTING HOLES CONTACT LOCAL GE HEALTHCARE INSTALLATION PROJECT MANAGER OR LEAD FIELD ENGINEER TO VERIFY THAT THE PROPER FULL SIZE FLOOR MOUNTING TEMPLATE IS USED.

MEDICAL GAS FLOOR EXIT LOCATIONS



Customer/Contractor Alert: It is the responsibility of the Customer or their Contractor to drill all anchor/thru-bolting holes for anchoring the positioner and table to the floor. Refer to GEHC document no. *2290880-2-100 for installation preparation and procedures.

NOTE: THRU BOLTING IS HIGHLY PREFERRED FOR THE INSTALLATION OF THE POSITIONER BASEPLATE AND OMEGA TABLE. HARDENED BOLTS AND 4" x 4" [102mm x 102mm] STEEL PLATES TO BE USED ARE SUPPLIED BY GE HEALTHCARE AS INDICATED ON THE ACTUAL DETAIL DRAWING. BE ADVISED, HOWEVER, THAT ADDITIONAL SUPPORT STRUCTURES: STEEL BEAMS, PLATES, CORE BORING OF MOUNTING HOLES, ETC., ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.

NOTE: IF THRU BOLTING IS NOT POSSIBLE, FLOOR ANCHORS CAN BE USED IF APPROVED BY CUSTOMERS STRUCTURAL ENGINEER. FOR ON GRADE INSTALLATIONS, MOUNTING KIT CAT. NO. 2286398 SHOULD BE ORDERED. ANCHORS INCLUDED IN KIT SHOULD BE APPROVED BY CUSTOMERS STRUCTURAL ENGINEER.

NOTE: BASEPLATES MUST BE LEVEL WITHIN 1/32" [0.79mm]

NOTE: JOISTS MUST BE SPANNED WITH STEEL REINFORCING. SIZE AND THICKNESS OF STEEL REINFORCING ARE DETERMINED BY THE ACTUAL PAN CONSTRUCTION ON SITE. STEEL PLATES, CHANNELS OR BEAMS MAY BE USED.

NOTE: DETERMINE THE POSITION OF THE "REBARS IN THE CONCRETE FLOOR SO ANCHOR HOLES WILL NOT RUN INTO THEM.

POSITIONER BOLT FORCES FOR WORST CASE CONDITIONS			
LOADS			
HORIZONTAL ACCELERATION = 625 lbs. [284 Kg]		BOLT TENSION (AT BOLT "A")	
VERTICAL ACCELERATION = 209 lbs. [95 Kg]		MAXIMUM TENSION = 881 lbs. [400 Kg]	
		BOLT SHEAR (U-ARM LOCKED)	
		MAXIMUM SHEAR = 120 lbs. [54 Kg]/BOLT	

OMEGA TABLE BOLT FORCES FOR WORST CASE CONDITIONS			
LOADS			
BOLT TENSION		BOLT SHEAR	
MAXIMUM TENSION = 1938 lbs. [880 Kg]/BOLT		MAXIMUM SHEAR = 407 lbs. [185 Kg]/BOLT	

SHEET TITLE: STRUCTURAL DETAILS

MODALITY TYPE: INNOVA ICS 520

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS, IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO THE ACTUAL CONSTRUCTION. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:
V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
142089	00
DATE: 01.Jul.14	
DRAWN BY: REK	
CHECKED BY: LLM	
QT. NO: PR11C14447V4	
QT. DT: 25Jun.14	

REVISION HISTORY:

SHEET
S2

PIM R2
RQ - 144741
This drawing is based on Sketch No.: 14NW1270



GE Healthcare

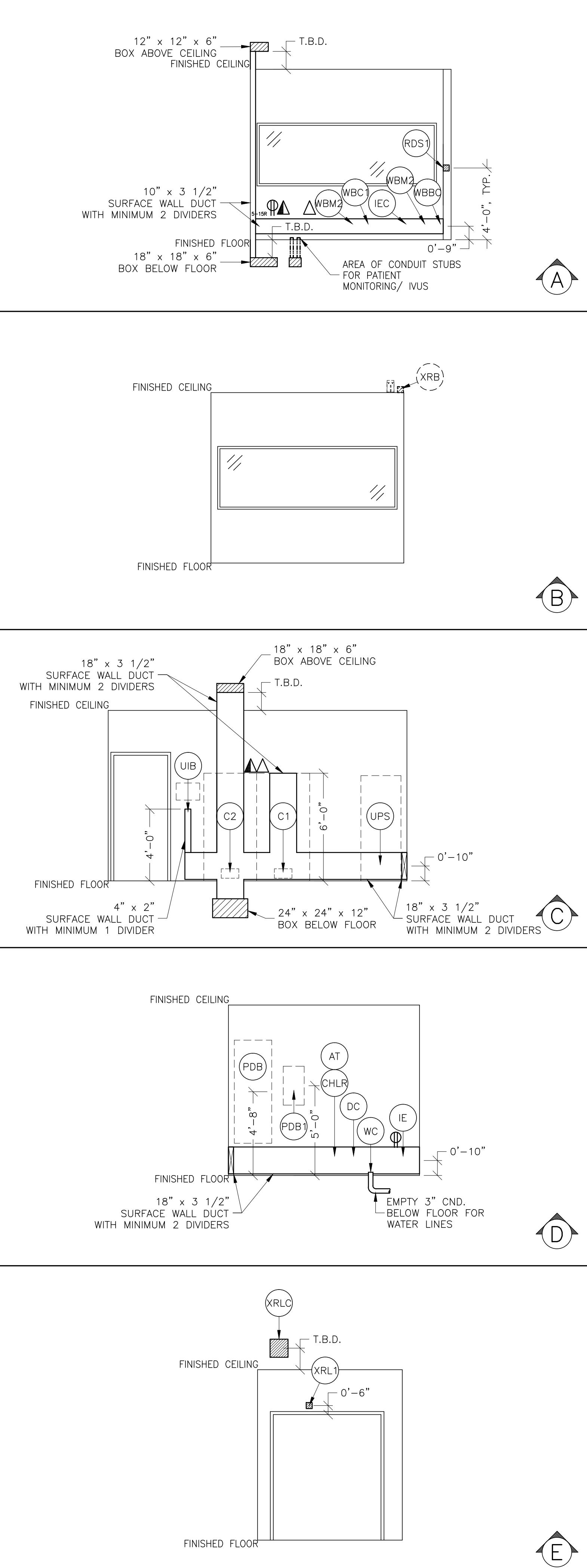
Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

SCALE: 1/4" = 1'-0"

ELECTRICAL PLAN

EXISTING CEILING HEIGHT = 9'-6"

JUNCTION POINT DESCRIPTIONS



CONDUIT RUNS: INNOVA IGS/ PLUS	
CONDUITS REQUIRED FOR BASE SYSTEM (CONDUITS ARE LOCATED BELOW FLOOR)	
(1) LC1 TO C1/C2	FOUR 4" CNDS. USABLE CABLE LENGTH UP TO 60 FT.
(2) LC1 TO LU5	ONE 4" & ONE 2" CND. USABLE CABLE LENGTH 13 FT.
(57) LU5 TO C1/C2	ONE 4" & ONE 2" CND. (ONLY FOR STATES WITH ACHA INSPECTION) USABLE CABLE LENGTH UP TO 60 FT.
(3) WBC1 TO C1/C2	ONE 3 1/2" & TWO 2 1/2" CNDS. USABLE CABLE LENGTH UP TO 60 FT.
CONDUITS REQUIRED FROM POINT "XRLC" (CONDUITS ARE LOCATED ABOVE CEILING)	
(4) XRLC TO XRL1	ONE 1/2" CND.
(6) XRLC TO C2	ONE 1/2" CND.
(7) XRLC TO 120-V 1# POWER	CND. AS REQ'D
CONDUITS REQUIRED FROM POINT "WBBC" (CONDUITS ARE LOCATED BELOW FLOOR)	
(8) WBBC TO LU5	ONE 2 1/2" CND. USABLE CABLE LENGTH 88 FT.
CONDUITS REQUIRED FROM POINT "XRB" (CONDUITS ARE LOCATED ABOVE CEILING)	
(9) XRB TO POWER STRIP IN CONTROL AREA	ONE 3/4" CND.
CONDUITS REQUIRED FROM POINT "WBM1" (CONDUITS ARE LOCATED ABOVE CEILING)	
(12) WBM1 TO C1	TWO 2 1/2" CNDS. (UP TO FOUR MONITOR SUSPENSION) USABLE CABLE LENGTH UP TO 40 FT.
(12) WBM1 TO C1	FOUR 2 1/2" CNDS. (SIX OR EIGHT MONITOR SUSPENSION) USABLE CABLE LENGTH UP TO 40 FT.
(13) WBM1 TO WBC1	ONE 2 1/2" CND. USABLE CABLE LENGTH 40 FT.
CONDUITS REQUIRED FROM POINT "WC" (CONDUIT IS LOCATED IN OR BELOW FLOOR)	
(14) WC TO LC1	ONE EMPTY 3" CND. (FOR WATER LINES) (USABLE CABLE RUN TO INJECTOR BOX OR AT LC1) (USABLE CABLE LENGTH UP TO 60 FT)
CONDUITS REQUIRED FOR AN "INJECTOR" (CONDUITS ABOVE CEILING OR BELOW FLOOR)	
(27) IE TO IH	ONE 3" CND.
(28) IE TO IEC	ONE 3" CND.
CONDUIT RUNS: PHYSIO MONITORING/ IVUS	
CONDUITS REQUIRED FOR GENERIC PHYSIO	
(52) PC/IVUS TO WBM1	ONE 3" CND. (LOCATED ABOVE CEILING)
(53) PC TO TRAM	ONE 3" CND. (LOCATED IN/BELOW FLOOR)
(54) IVUS TO TRAM	ONE 3" CND. (LOCATED IN/BELOW FLOOR)
LDC TO TRAM	ONE 3" CND. (LOCATED IN/BELOW FLOOR)

ELECTRICAL OUTLET LEGEND

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS. HEIGHT ABOVE FLOOR DETERMINED BY LOCAL CODES UNLESS OTHERWISE SPECIFIED.

- DUPLEX HOSPITAL GRADE, DEDICATED WALL OUTLET 120-V, SINGLE PHASE POWER
- DEDICATED TELEPHONE LINE(S) (SEE ELECTRICAL DETAIL ELEC-1 OR ELEC-67)
- NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84 OR ELEC-87)
- 5-15R NEMA RECEPTACLE, DEDICATED OUTLET 120-V, SINGLE PHASE POWER
- DUPLEX HOSPITAL GRADE, DEDICATED OUTLET 120-V EMERGENCY, SINGLE PHASE POWER, 15A

JUNCTION POINT NOTES

- ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMERS ELECTRICAL CONTRACTOR.
- CONDUIT AND DUCT RUNS SHALL HAVE SWEEP RADIUS BENDS
- CONDUITS AND DUCT ABOVE CEILING OR BELOW FINISHED FLOOR MUST BE INSTALLED AS NEAR TO CEILING OR FLOOR AS POSSIBLE TO REDUCE RUN LENGTH.
- CEILING MOUNTED JUNCTION BOXES ILLUSTRATED ON THIS PLAN MUST BE INSTALLED FLUSH WITH FINISHED CEILING.
- ALL DUCTWORK MUST MEET THE FOLLOWING REQUIREMENTS:
 - DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
 - DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
 - DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
 - PVC AS A SUBSTITUTE MUST BE USED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL CODES.
- ALL OPENINGS IN ACCESS FLOORING ARE TO BE CUT OUT AND FINISHED OFF WITH GROMMET MATERIAL BY THE CUSTOMERS CONTRACTOR.
- GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
- 10 FOOT PIGTAILS AT ALL JUNCTION POINTS.
- ALL WIRING MUST BE THIN OR TFFN STRANDED COPPER THERMOPLASTIC 600 VOLT OR EQUIVALENT INSULATION. ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.
- GROUNDING IS CRITICAL TO EQUIPMENT FUNCTION AND PATIENT SAFETY. SITE MUST CONFORM TO WIRING SPECIFICATIONS SHOWN ON THIS PLAN.

SEISMIC OVERVIEW

THE CUSTOMER MUST COMPLY WITH LOCAL SEISMIC ANCHORING CODES THAT PERTAIN TO THIS SITE.

SEISMIC CALCULATIONS ARE AVAILABLE UPON REQUEST THROUGH YOUR LOCAL GEHC PROJECT MANAGER FOR GEHC MANUFACTURED EQUIPMENT. THESE CALCULATIONS ARE PER CALIFORNIA BUILDING CODE (CBC) AND INTERNATIONAL BUILDING CODE (IBC).

FEEDER TABLE

REV. DATE: 12/22/10

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM DIST. TRANS. TO ROOM DISCONNECT. CALCULATIONS ARE AT NOMINAL VOLTAGE BASED UPON 1/0 WIRE SIZE FROM ROOM DISCONNECT TO POWER CABINET WITH A MAXIMUM RUN OF 25 FT.
- NEUTRAL MUST BE TERMINATED INSIDE THE MAIN DISCONNECT PANEL AND NOT AT ANY GE CABINET.
- THE GROUNDING CONDUCTOR () WILL BE A 2 AWG MINIMUM OR MEET LOCAL CODE REQUIREMENTS, WHICHEVER IS LARGER.
- THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRA.
- MINIMUM WIRE SIZE FOR CIRCUIT BREAKER, BASED ON RECOMMENDED OVERCURRENT PROTECTION.
- FOR A FULL SYSTEM UPS, REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.
- IF THE FEEDER IS BIGGER THAN 3/0, THE HOSPITAL MUST PROVIDE AND INSTALL A REDUCTION BOX.

RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE															
	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)	FEEDER (GROUND)
50	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)
100	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)
150	3/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)	1/0 (2)
200	4/0 (2)	4/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)	2/0 (2)
250	300M (2)	300M (2)	250M (2)	250M (2)	4/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)	3/0 (2)
300	400M (2)	350M (2)	300M (2)	250M (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)	4/0 (2)
350	600M (2)	500M (2)	400M (2)	350M (2)	300M (2)	300M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)	250M (2)
400	700M (2)	600M (2)	500M (2)	500M (2)	400M (2)	350M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)	300M (2)

GE Project Manager: HANK ROLUFS
Telephone: 360-887-2380

THE GE HP TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SIZING QUESTIONS AND CAN BE REACHED AT (877)-305-9677

POINT		THE FOLLOWING MATERIALS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER'S ELECTRICAL CONTRACTOR		
DESCRIPTION	QTY.	HARDWARE	DETAIL NO., SHT. E3	
AT COOLIX 4100 WATER TRANSFORMER	1	EXTERNALLY CONNECTED TO 'CHLR'		
C1 ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6	
C2 ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6 ELEC-8	
CHLR COOLIX 4100 WATER CHILLER	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
DC DETECTOR CHILLER	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
IE INJECTOR ELECTRONICS	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
IEC INJECTOR CONTROL	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
IH INJECTOR HEAD	1	EXTERNALLY CONNECTED AT TABLE BASE		
LC1 INNOVA LC	1	24 X 24 X 12 IN. BOX SUITABLE LENGTH OF 6 IN. DIA. THREADED CONDUIT OR PIPE 6 IN. DIA. LOCKNUTS 1/2 X 12 X 6 IN. BOX 1/2 IN. DIA. BUSHING 4 IN. DIA. BUSHING	ELEC-100 ELEC-177	
LU5 OMEGA TABLE	1	COVERPLATE 2 1/2 IN. DIA. BUSHING & LOCKNUT 6 X 6 X 16 IN. BOX	ELEC-48 ELEC-134	
PDB MAIN DISCONNECT	1	150-AMP PANEL INCLUDED IN ORDER	ELEC-161	
PDB1 LOCAL SERVICE DISCONNECT	1	150-AMP LOCAL SERVICE DISCONNECT (CUSTOMER SUPPLIED)		
RDS1 EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16	
RDS2 EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16	
UIB UPS INTERFACE BOX	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-6	
UPS UPS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5	
WBBC BOLUS WALLBOX	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
WBC1 OPERATORS CONSOLE	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
WBM1 TV MONITOR	1	COVERPLATE 2 1/2 IN. DIA. CHASE NIPPLE 18 X 18 X 6 IN. BOX	ELEC-8	
WBM2 TV MONITOR	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5	
WC WATER CHILLER HOSE OUTLET	1	3 IN. CONDUIT STUBBED 2 IN. ABOVE FLOOR	ELEC-9	
XRB XR BUZZER (LOCATED ABOVE CEILING)	1	SINGLE GANG BOX	ELEC-8	
XRL1 WARNING LIGHT	1	COVERPLATE SINGLE GANG BOX 7 X-RAY OR INCANDESCENT LIGHT FIXTURE - DO NOT USE FLUORESCENT FIXTURES	ELEC-157	
XRLC WARNING LIGHT CONTROLLER (AVAILABLE FROM GEHC, CALL 800-279-7925 OR LOCAL GE INSTALLATION PROJECT MGR.	1	E4502SS WARNING LIGHT & ROOM LIGHT CONTROL OR EQUIVALENT MAX 24V CONTROLLER	ELEC-157	

CONTRACTOR SUPPLIED AND INSTALLED WIRING	
ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS.	
WIRE RUN, FROM - TO	QUANTITY, WIRE SIZE/COLOR
<2> 3 PHASE > PDB1	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
<21> PDB1 > PDB	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
<19> PDB > C1 <JED1>	3-1/0 BLACK, 1-1/0 GREEN
<19> PDB > C1 <PD>	2-ND. 10 BLACK, 1-ND. 10 GREEN
<19> PDB > C2	3-ND. 8 BLACK, 1-ND. 8 GREEN
<19> PDB > AT	3-ND. 10 BLACK, 1-ND. 10 GREEN
<15> PDB > UPS	6-ND. 6 BLACK, 1-ND. 6 WHITE, 2-ND. 6 GREEN
<17> PDB > RDS1	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<18> PDB > RDS2	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<7> XRLC > 1 PHASE	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN
<6> XRLC > C2	2-ND. 14 BLACK, 2-ND. 14 WHITE, 1-ND. 14 GREEN
<4> XRL1 > XRLC	1-ND. 14 BLACK, 1-ND. 14 WHITE, 1-ND. 14 GREEN

PROJECT TITLE: **V A PALO ALTO**

PROJECT TYPE: **INNOVA IGS 520**

SHEET TITLE: **ELECTRICAL LAYOUT**

MODALITY TYPE: **INNOVA IGS 520**

THIS PLAN IS SUBMITTED TO REQUEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS. ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO DETAILS AND SPECIFICATIONS OF THE EQUIPMENT MANUFACTURER. THE USER OF THIS PLAN FOR ANY CONSTRUCTION PURPOSES, HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

REVISION HISTORY:

DATE	REVISION
01Jul.14	00

DRAWN BY: **REK**

CHECKED BY: **LLM**

QT. NO: **PR11C14447Y4**

QT. DT: **25Jun.14**

REVISION HISTORY:

SHEET **E1**

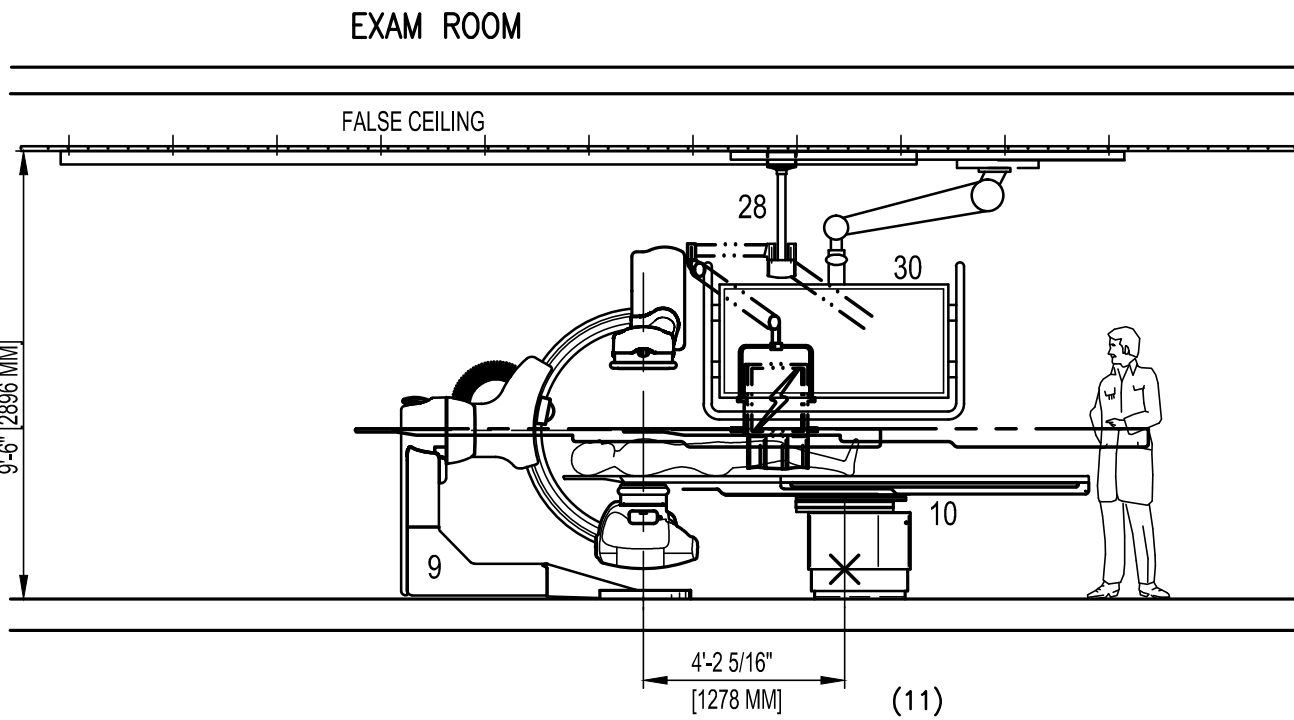
GE Healthcare

Healthcare Project Implementation - Design Center

Minneapolis, MN

INTERCONNECT DIAGRAM

TYPICAL VIEWS



EQUIPMENT DESCRIPTIONS

ITEM	DESCRIPTION	WEIGHT (lb)	HEAT DISSIPATION (btu)	DRAWING DESIGNATOR
1	XR BUZZER	2		XR8
2	ATLAS CABINET C2	659	1825	C2
3	ATLAS CABINET C1	1115	3389	C1
4	DETECTOR CONDITIONER	33	706	DC
5	COOLUX 4100 WATER CHILLER	265	18725	CHLR
6	20kva UPS CABINET	1170	4061	UPS
7	UPS INTERFACE BOX			UIB
8	TV CEILING SUSPENSION (8 MONITOR)	557	1228	WBM1
9	INNOVA LC POSITIONER	1653	2416	LC1
10	OMEGA IQ TABLE	1750	614	LU5
11	INNOVA VCIM HIGH DL KEYBOARD CONSOLE	22	204	--
12	VCIM OPERATOR CONSOLE	22	546	WBC1
13	ROOM LIGHTS			RML1
14	XRAY WARNING LAMP			XRL1
15	XRAY WARNING LAMP CONTROLLER			XRLC
16	RDS1 PUSHBUTTON			RDS1
17	RDS2 PUSHBUTTON			RDS2
18	PDB MAIN DISCONNECT	326	1532	PDB
19	LOTO DISCONNECT BREAKER			PDB1
20	3kva UPS CABINET	81	546	UPS1
21	BOLUS CHASE HANDSWITCH	2		WBBC

OPTIONS

ITEM	DESCRIPTION	WEIGHT (lb)	HEAT DISSIPATION (btu)	DRAWING DESIGNATOR
22	ADVANTAGE WINDOWS WORKSTATION	81	1201	AW
23	IVUS VOLCANO CONSOLE	68	1631	IVUS
24	IVUS VOLCANO COLOR PRINTER	X	X	--
25	INJECTOR HEAD	15		IH
26	INJECTOR ELECTRONICS	37	320	IE
27	REMOTE CONTROL FOR INJECTOR	4		IEC
28	LAMP (RADIATION SHIELD TRACK)	143		LMP
29	LARGE DISPLAY MONITOR CABINET	254	3412	LDC
30	LARGE DISPLAY MONITOR	784	1706	LDM
31	MACH 3 TRANSFORMER	70	X	MST
32	MACLAB PHYSIO MONITORING	566	2935	PC
33	PRINTER (PHYSIO)	X	309	--
34	TRAM (PHYSIO)	8	X	TRAM
35	REMOTE OPERATING TERMINAL (PHYSIO)	46	682	RMOT
36	MICRO PACE STIMULATOR (PHYSIO)	X	X	MP
37	SKYTRON LIGHTING UNIT	50	341	SL
38	150 kva UPS	2160	31802	UPS
39	UPS BATTERY CABINET	3529	X	MBP
40	MAINTENANCE BYPASS PANEL	350	X	AT
41	COOLUX 4100 AUTOTRANSFORMER	99	239	

POWER SPECIFICATIONS

INNOVA SYSTEMS
REV. DATE: 01/04/07

VOLTAGE PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS.
RANGE OF LINE VOLTAGES
NOMINAL LINE VOLTAGE OF 360 TO 480, 3 PHASE, 50 OR 60 HZ

REQUIRED POWER SUPPLY: WYE DISTRIBUTION

MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

TABLE A
ALLOWABLE
INPUT
VOLTAGES/
CURRENT
DEMAND

NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT (AMPS)	
		MAX MOMENTARY	CONTINUOUS
360	324-396	304	32
380	342-418	289	31
400	360-440	274	29
420	378-462	264	28
440	396-484	249	26
460	414-506	238	25
480	432-528	228	24

ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

NOTE LOW LINE CONDITIONS MAY INHIBIT SOME HIGH KVP TECHNIQUES.
THE GENERATOR AUTOMATICALLY ESTABLISHES THESE INHIBITS
BASED ON ACTUAL LINE CONDITIONS AND SYSTEM REGULATION.

PHASE-- BALANCE. PHASE-TO-PHASE VOLTAGES MUST BE WITHIN +2 PERCENT
OF THE LOWEST PHASE-TO-PHASE VOLTAGE. MAXIMUM ALLOWABLE
TRANSIENT VOLTAGE EXCURSIONS ARE 2.5 PERCENT OF RATED
LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND
FREQUENCY OF 10 TIMES PER HOUR.

POWER DEMAND CONTINUOUS POWER DEMAND = 20KVA. (MAX DEMAND = 171 KVA)

TABLE B
MAXIMUM
MOMENTARY
POWER
DEMAND.

DEMAND	ADVANTX 100
kVa * POWER FACTOR AT	171 0.9
mA	1250
kVp	80

* DEMAND INCLUDES POWER FOR ENTIRE ADVANTX SYSTEM.
LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND
MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

DISTRI- BUTION TRANS- FORMER FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE
IS 225 KVA.

ELECTRICAL NOTES

- NOTE 1: ALL WIRES SPECIFIED SHALL BE COPPER STRANDED, FLEXIBLE, THERMO-PLASTIC, COLOR CODED, CUT 10 FOOT LONG AT OUTLET BOXES, DUCT TERMINATION POINTS OR STUBBED CONDUIT ENDS.
ALL CONDUCTORS, POWER, SIGNAL AND GROUND, MUST BE RUN IN A CONDUIT OR DUCT SYSTEM. ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS. WIRE RUNS MUST BE CONTINUOUS COPPER STRANDED AND FREE FROM SPLICES. **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**
- NOTE 2: WIRE SIZES GIVEN ARE FOR USE OF EQUIPMENT. LARGER SIZES MAY BE REQUIRED BY LOCAL CODES.
- NOTE 3: IT IS RECOMMENDED THAT ALL WIRES BE COLOR CODED, AS REQUIRED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 4: CONDUIT SIZES SHALL BE VERIFIED BY THE ARCHITECT, ELECTRICAL ENGINEER OR CONTRACTOR, IN ACCORDANCE WITH LOCAL OR NATIONAL CODES.
- NOTE 5: CONVENIENCE OUTLETS ARE NOT ILLUSTRATED. THEIR NUMBER AND LOCATION ARE TO BE SPECIFIED BY OTHERS. LOCATE AT LEAST ONE CONVENIENCE OUTLET CLOSE TO THE SYSTEM CONTROL, THE POWER DISTRIBUTION UNIT AND ONE ON EACH WALL OF THE PROCEDURE ROOM. USE HOSPITAL APPROVED OUTLET OR EQUIVALENT.
- NOTE 6: GENERAL ROOM ILLUMINATION IS NOT ILLUSTRATED. CAUTION SHOULD BE TAKEN TO AVOID EXCESSIVE HEAT FROM OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.
- NOTE 7: **ROUTING OF CABLE DUCTWORK, CONDUITS, ETC., MUST RUN DIRECT AS POSSIBLE OTHERWISE MAY RESULT IN THE NEED FOR GREATER THAN STANDARD CABLE LENGTHS (REFER TO THE INTERCONNECTION DIAGRAM FOR MAXIMUM USABLE LENGTHS POINT TO POINT).**
- NOTE 8: CONDUIT TURNS TO HAVE LARGE, SWEEPING BENDS WITH MINIMUM RADIUS IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
- NOTE 9: A SPECIAL GROUNDING SYSTEM IS REQUIRED IN ALL PROCEDURE ROOMS BY SOME NATIONAL AND LOCAL CODES. IT IS RECOMMENDED IN AREAS WHERE PATIENTS MIGHT BE EXAMINED OR TREATED UNDER PRESENT, FUTURE, OR EMERGENCY CONDITIONS. CONSULT THE GOVERNING ELECTRICAL CODE AND CONFER WITH APPROPRIATE CUSTOMER ADMINISTRATIVE PERSONNEL TO DETERMINE THE AREAS REQUIRING THIS TYPE OF GROUNDING SYSTEM.
- NOTE 10: THE MAXIMUM POINT TO POINT DISTANCES ILLUSTRATED ON THIS DRAWING MUST NOT BE EXCEEDED.
- NOTE 11: PHYSICAL CONNECTION OF PRIMARY POWER TO GE EQUIPMENT IS TO BE MADE BY CUSTOMERS ELECTRICAL CONTRACTOR WITH THE SUPERVISION OF A GE REPRESENTATIVE. THE GE REPRESENTATIVE WOULD BE REQUIRED TO IDENTIFY THE PHYSICAL CONNECTION LOCATION, AND INSURE PROPER HANDLING OF GE EQUIPMENT.
- NOTE 12: GEHC CONDUCTS POWER AUDITS TO VERIFY QUALITY OF POWER BEING DELIVERED TO THE SYSTEM. THE CUSTOMER'S ELECTRICAL CONTRACTOR IS REQUIRED TO BE AVAILABLE TO SUPPORT THIS ACTIVITY.

DIAGRAM KEY

- CUSTOMER/CONTRACTOR SUPPLIED WIRING. ROUTE IN ADEQUATE CONDUIT OR RACEWAY.
- GE FURNISHED CABLE RUNS. ROUTE IN EMPTY CONDUIT OR RACEWAY.
- 59' [18M] MAXIMUM RUN LENGTH BETWEEN JUNCTION POINTS.
Feet [Meters]

REV DATE: 12.Mar.12

GE Healthcare
Healthcare Project Implementation - Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS
MODALITY TYPE: INNOVA ICS 520

V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT TITLE:

PROJECT	REVISION
142089	00
DATE:	01.Jul.14
DRAWN BY:	REK
CHECKED BY:	LLM
QT. NO:	PR11C14447V4
QT. DT:	25Jun.14

REVISION HISTORY:

SHEET
E2

ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)

ELEC-5
REV. DATE: 03/19/04

DUCT WIDTH	MINIMUM DIVIDERS REQUIRED
24" [610mm]	2
18" [457mm]	2
10" [254mm]	2
6" [152mm]	1
4" [102mm]	1

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
VERTICAL WALL DUCT (TYPICAL)

ELEC-6
REV. DATE: 03/19/04

DUCT WIDTH	MINIMUM DIVIDERS REQUIRED
24" [610mm]	2
18" [457mm]	2
10" [254mm]	2
6" [152mm]	1
4" [102mm]	1

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
J.B. / WALL DUCT DETAIL (TYPICAL)

ELEC-2
REV. DATE: 09/30/94

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
INSITE CONNECTION (TYPICAL)

ELEC-1
REV. DATE: 04/24/02

ONE OF THE FOLLOWING TWO SELECTIONS MUST BE INSTALLED AT THE LOCATION SHOWN ON THE ELECTRICAL PLAN (SHEET E1) FOR GE INSITE CONNECTION BASED UPON SYSTEM CONFIGURATION.

A) ONE INTERNET ACCESSIBLE VIRTUAL PRIVATE NETWORK (VPN) CONNECTION WITH A STATIC IP ADDRESS, AND ONE TELEPHONE LINE - DEDICATED-DIRECT-DIALING, VOICE GRADE.

OR

B) TWO TELEPHONE LINES - ONE DEDICATED DIRECT-DISTANCE-DIALING, VOICE GRADE AND ONE A DEDICATED DATA LINE.

ELECTRICAL DETAIL
BOX WITH COVERPLATE AND NETWORK JACK

ELEC-83
REV. DATE: 10/06/98

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
NETWORK CONNECTION (TYPICAL)

ELEC-84
REV. DATE: 03/06/04

FOR NUCLEAR SYSTEMS A DIRECT NETWORK CONNECTION IS TO BE MADE BETWEEN THE SYSTEM AND THE REVIEW WORKSTATION.

ELECTRICAL DETAIL
INNOVA PLUS MAIN DISCONNECT PANEL

ELEC-161
REV. DATE: 09/27/10

ELECTRICAL DETAIL
CONDUITS THRU-FLOOR (TYPICAL)

ELEC-9
REV. DATE: 08/08/94

ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)

ELEC-5A
REV. DATE: 06/16/08

ELECTRICAL DETAIL
X-RAY WARNING LIGHT & ROOM LIGHT CONTROL PANEL

ELEC-157
REV. DATE: 04/23/09

CONTROL PANEL CAN BE LOCATED ABOVE THE CEILING NEAR THE WARNING LIGHT

UNLESS SPECIFIED ON SHEET A1 AS BEING INCLUDED ON EQUIPMENT ORDER, ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER'S CONTRACTOR

ELECTRICAL DETAIL
EMERGENCY OFF BUTTON

ELEC-16
REV. DATE: 05/14/09

ELECTRICAL DETAIL
BOX WITH COVERPLATE (TYPICAL)

ELEC-8
REV. DATE: 09/30/94

DETAIL NOT TO SCALE

GE Healthcare

Healthcare Project Implementation - Design Center

Minneapolis, MN

SHEET TITLE: ELECTRICAL DETAILS

MODALITY TYPE: INNOVA ICS 520

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM TO THE ACTUAL CONSTRUCTION PHASES. HOWEVER, THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
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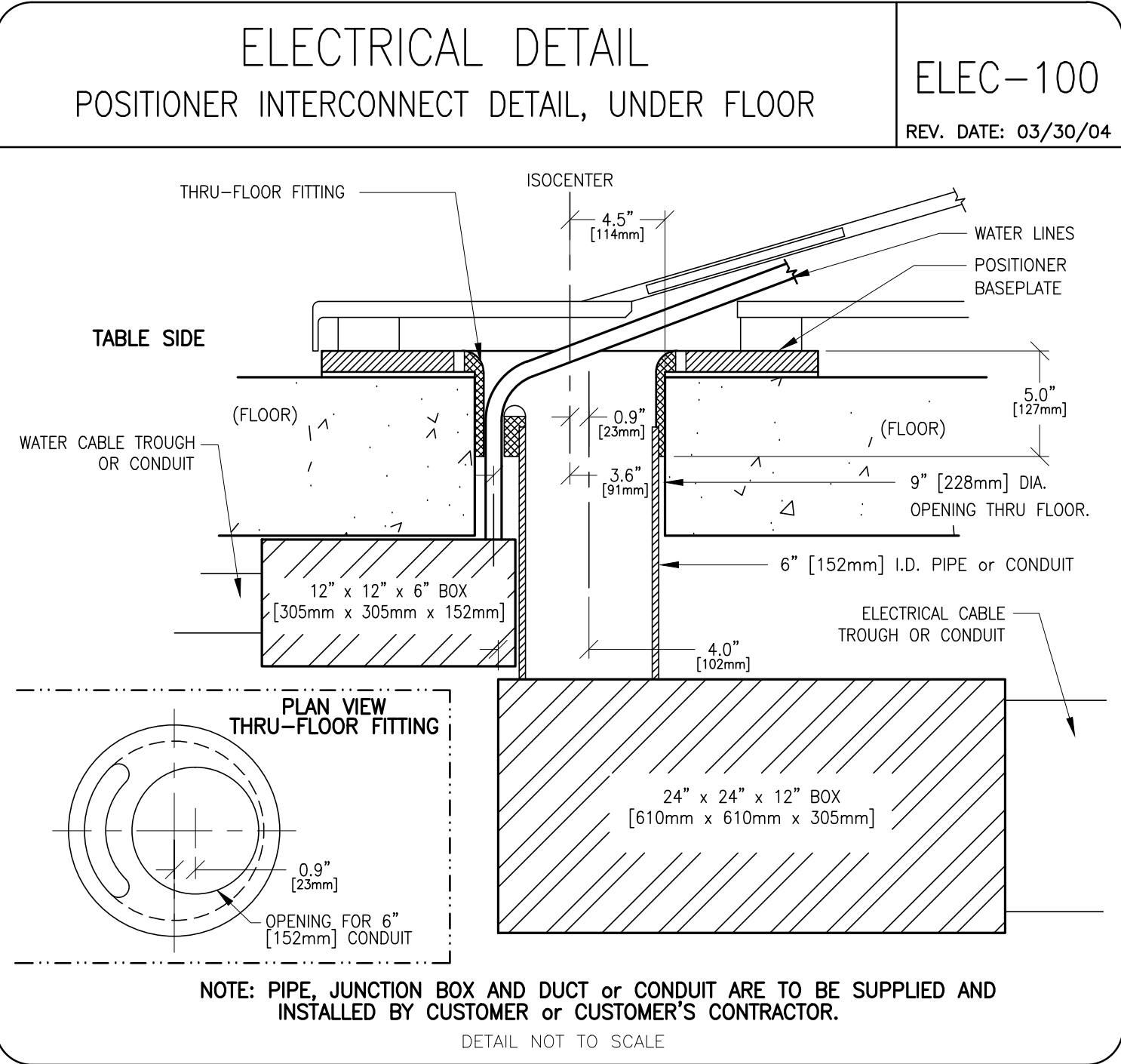
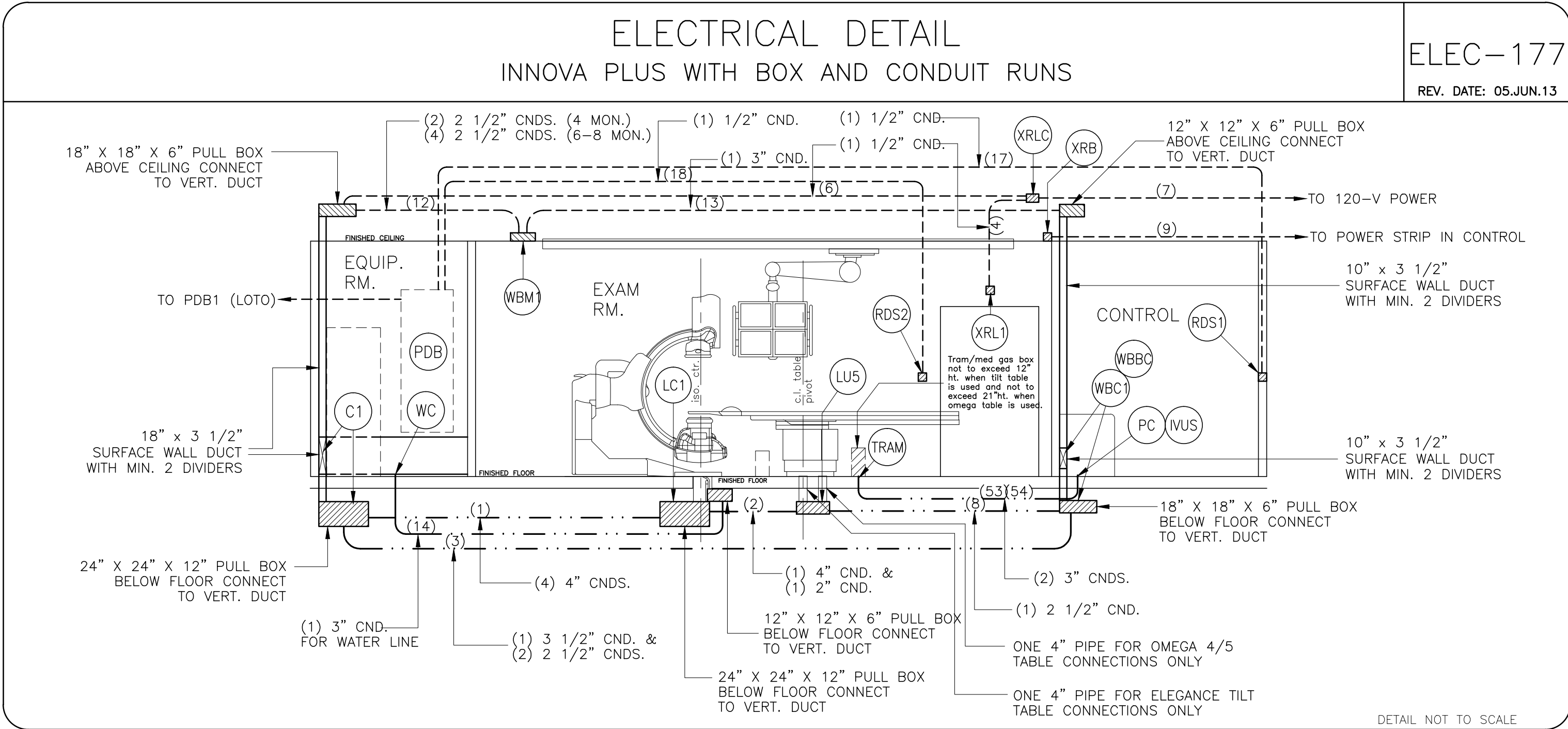
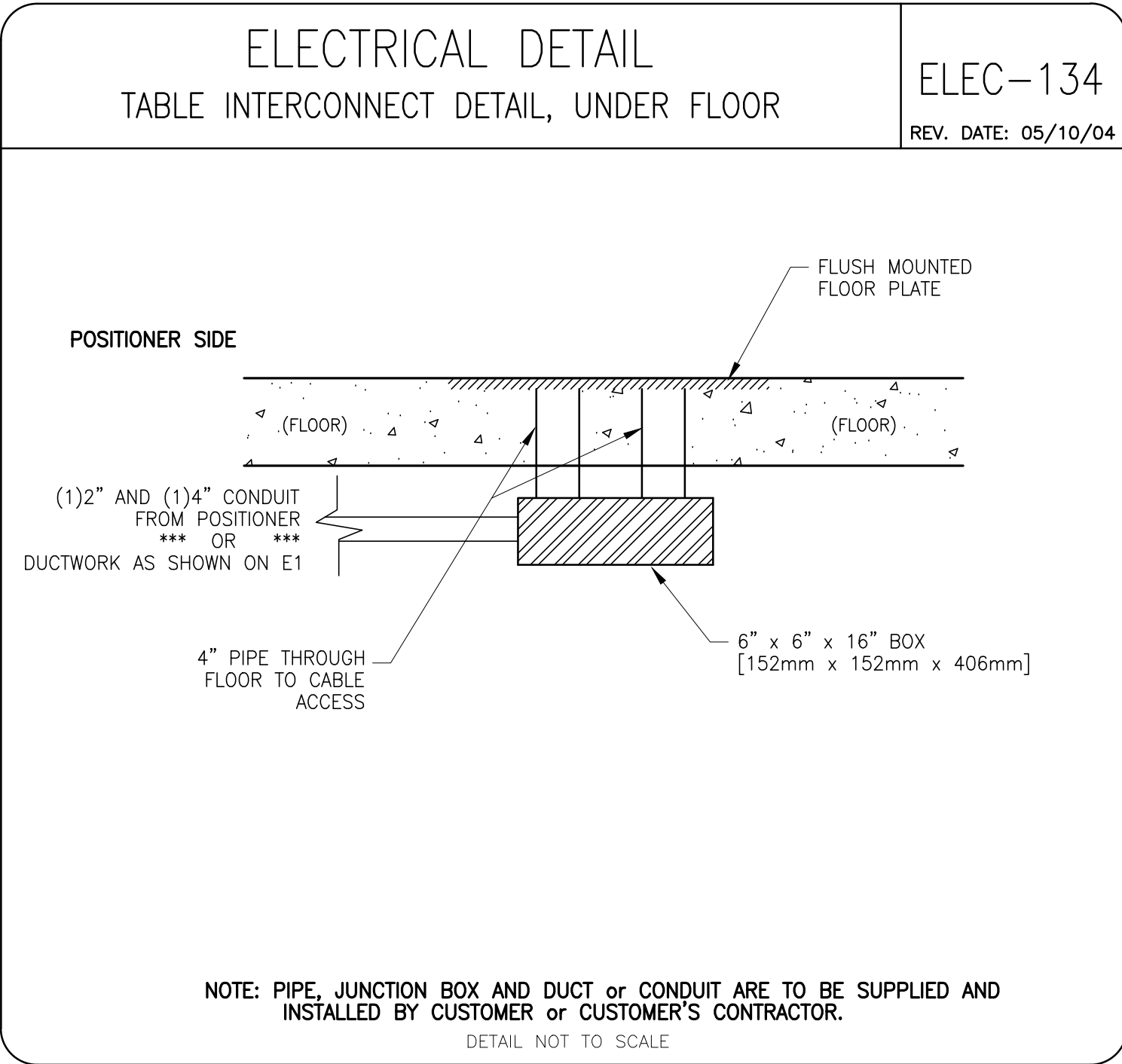
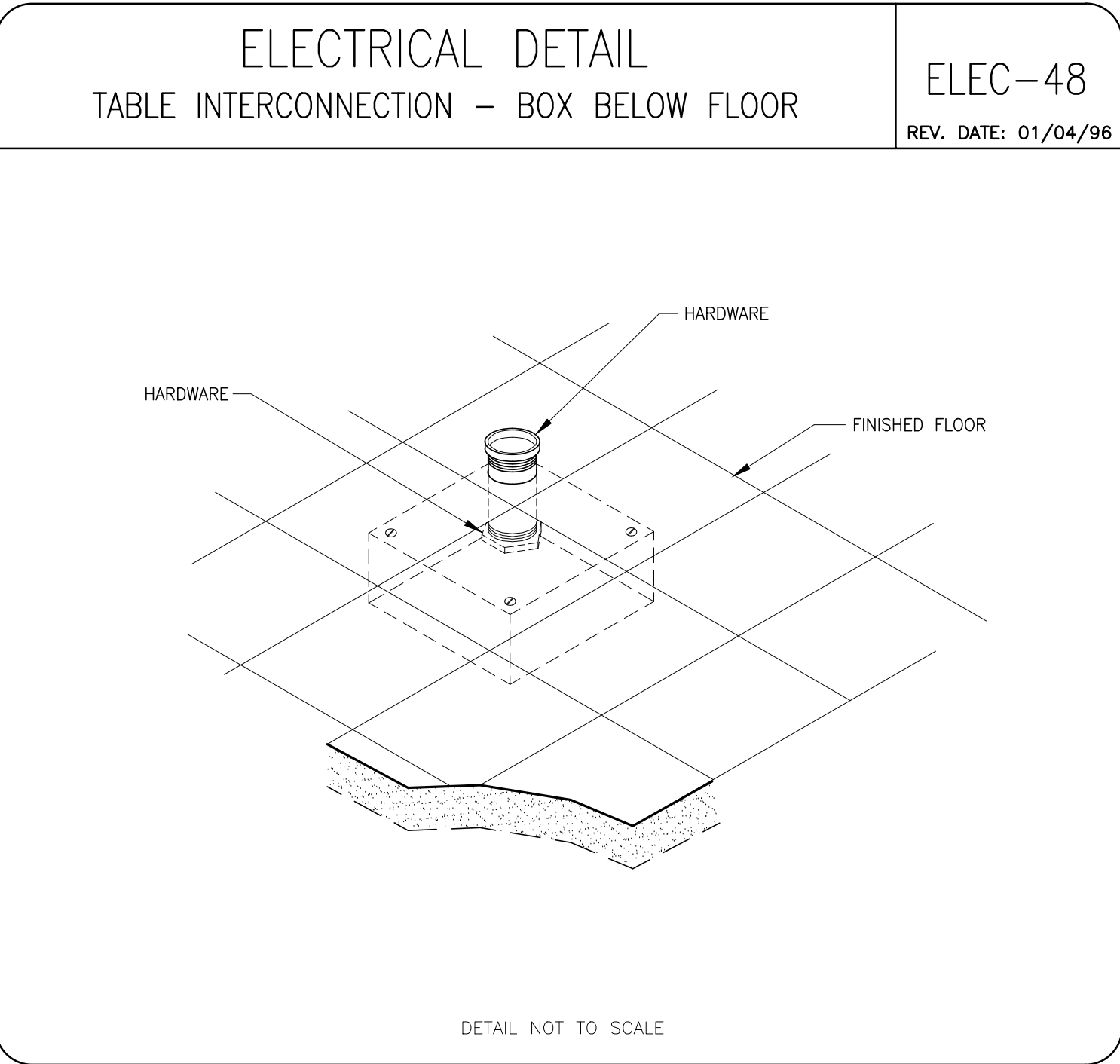
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REVISION HISTORY:

SHEET

E3

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED



GE Healthcare

Healthcare Project Implementation – Design Center

Minneapolis, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS

MODALITY TYPE: INNOVA ICS 520

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PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT

142089

REVISION

00

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01.Jul.14

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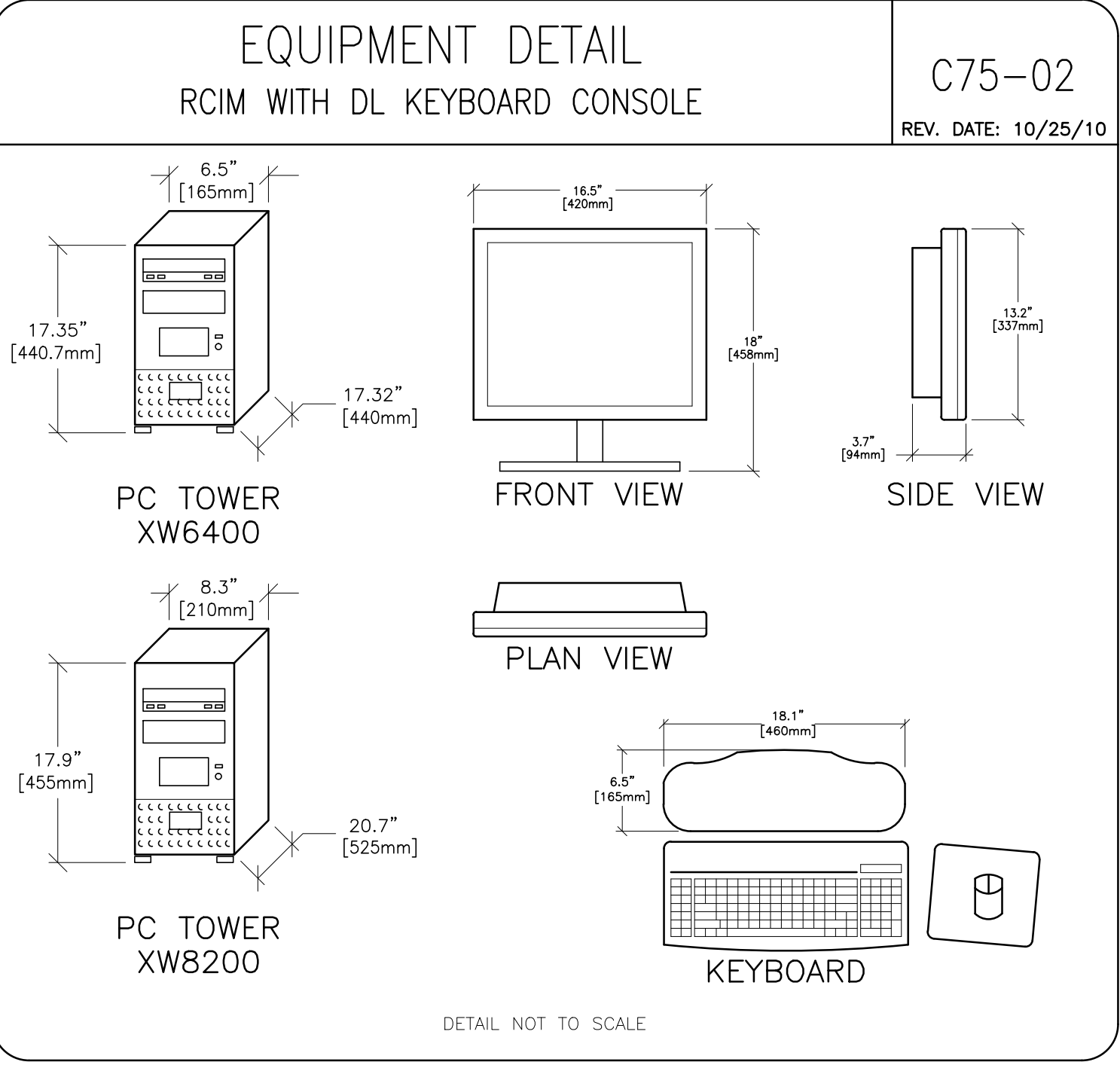
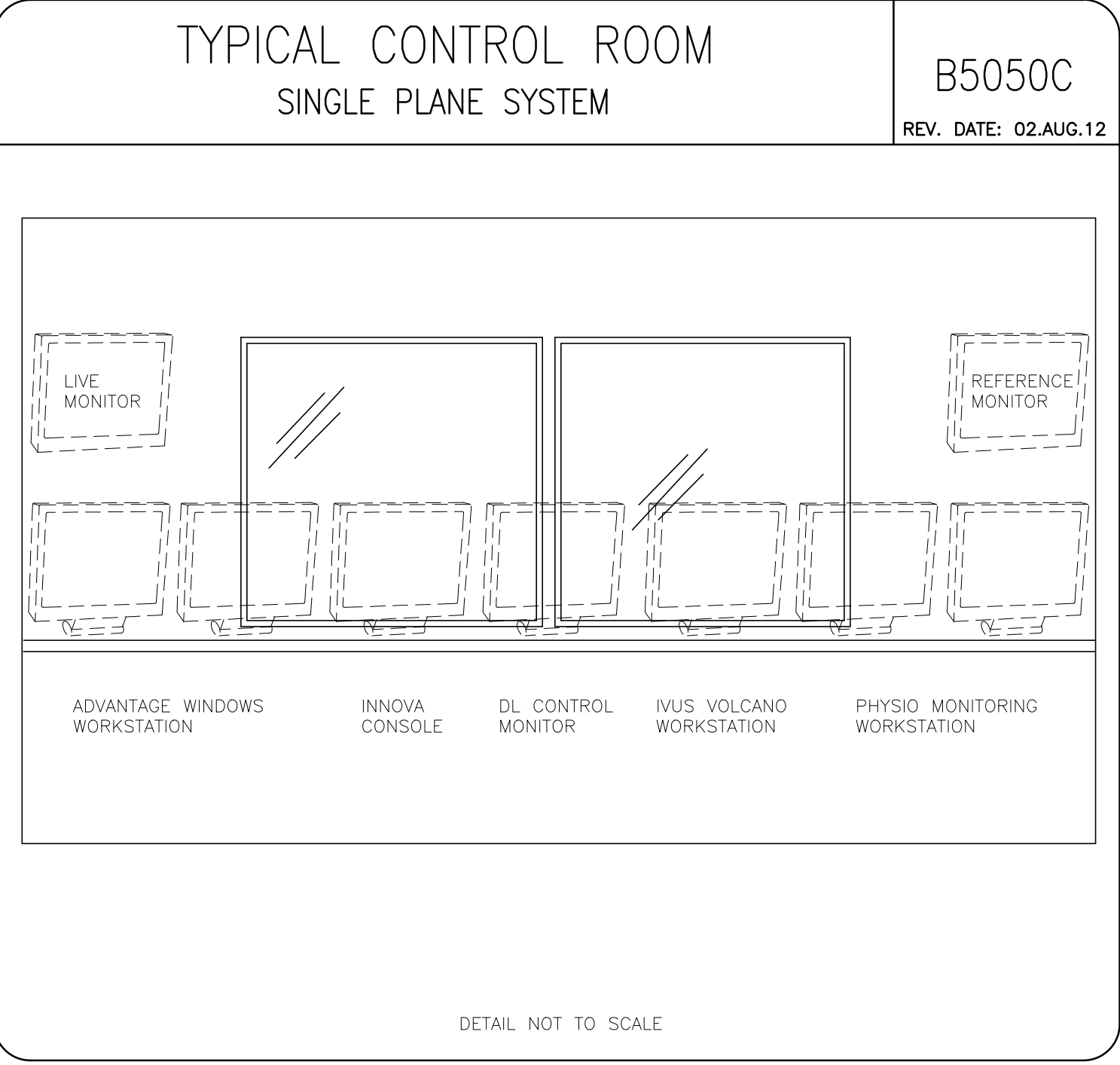
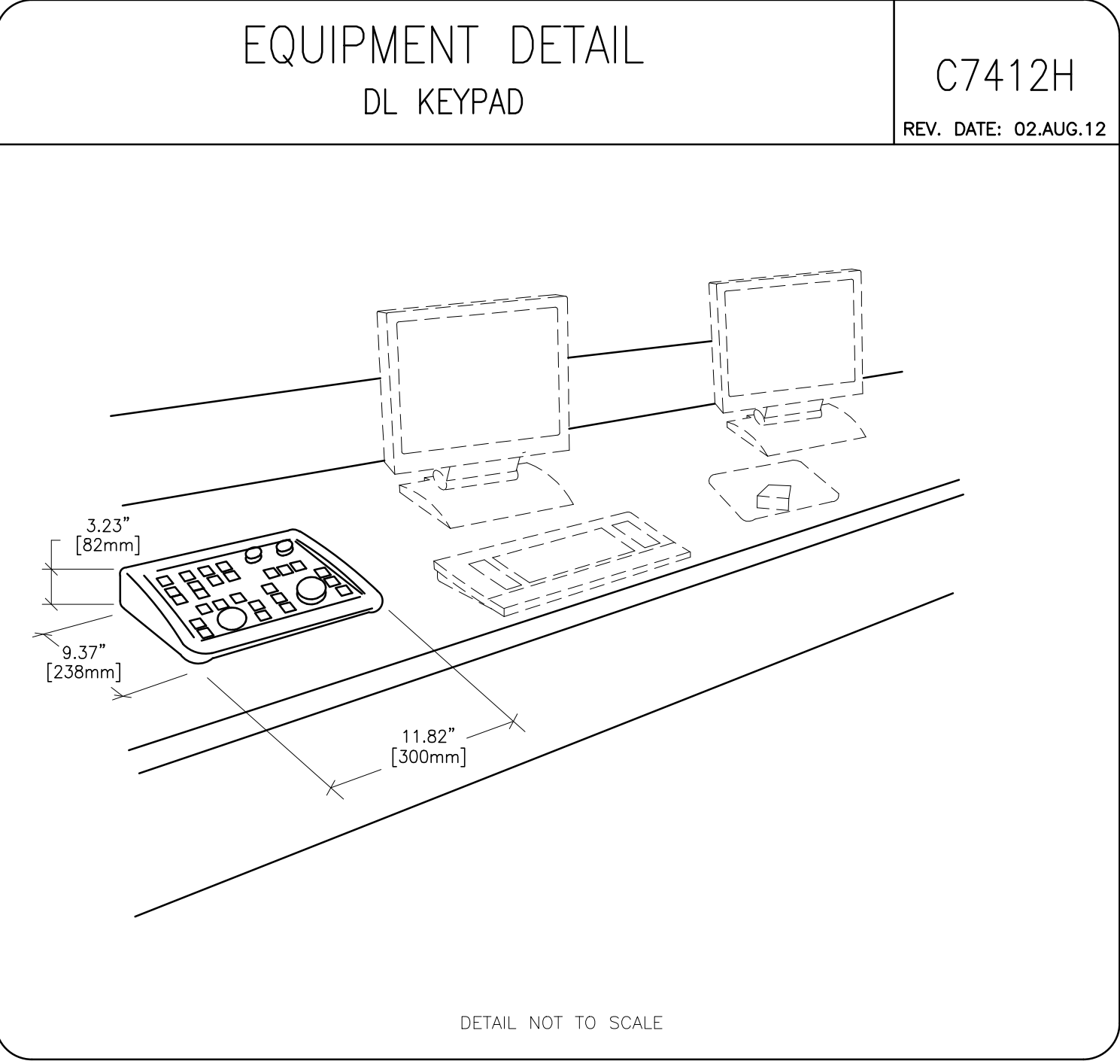
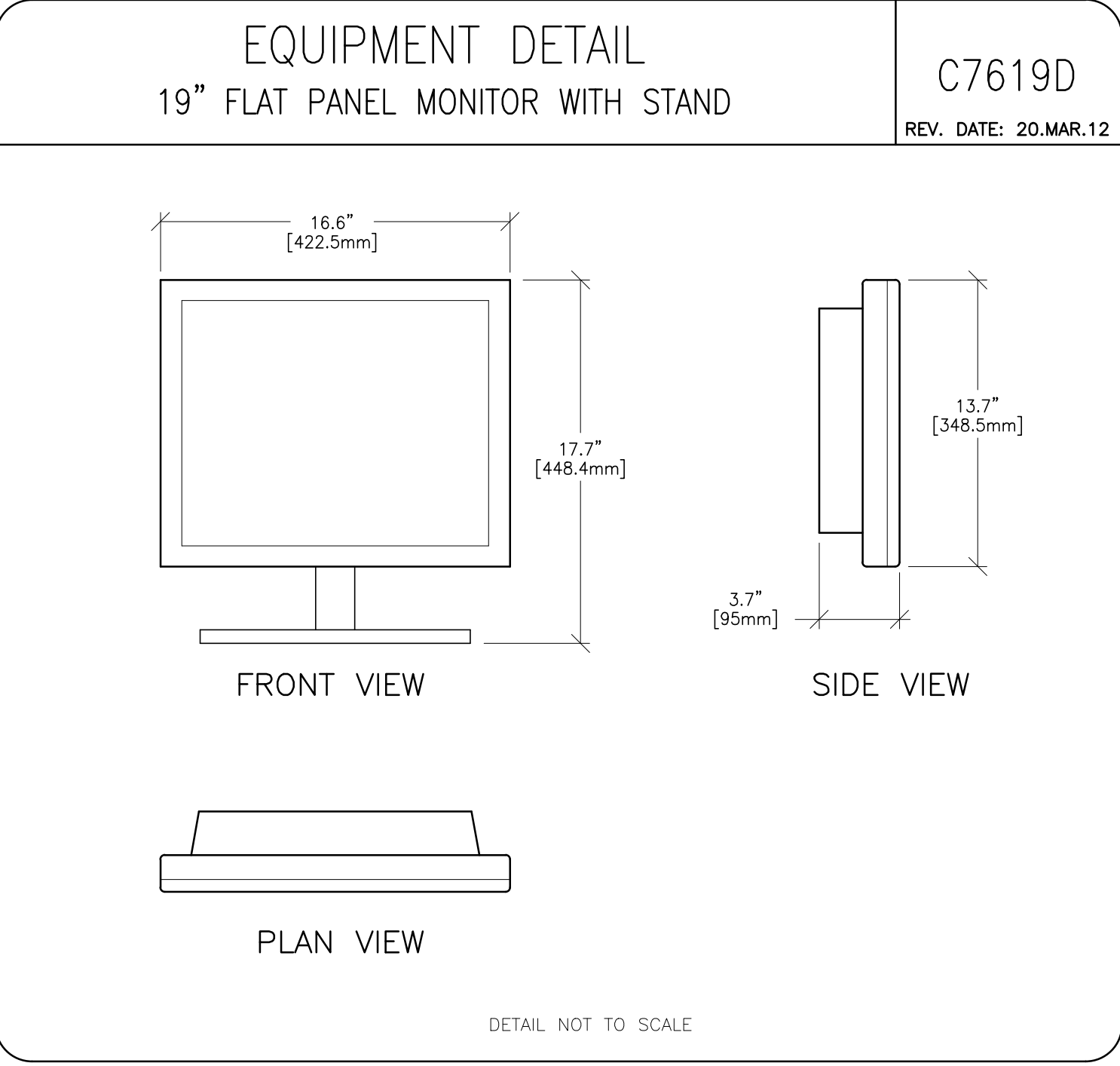
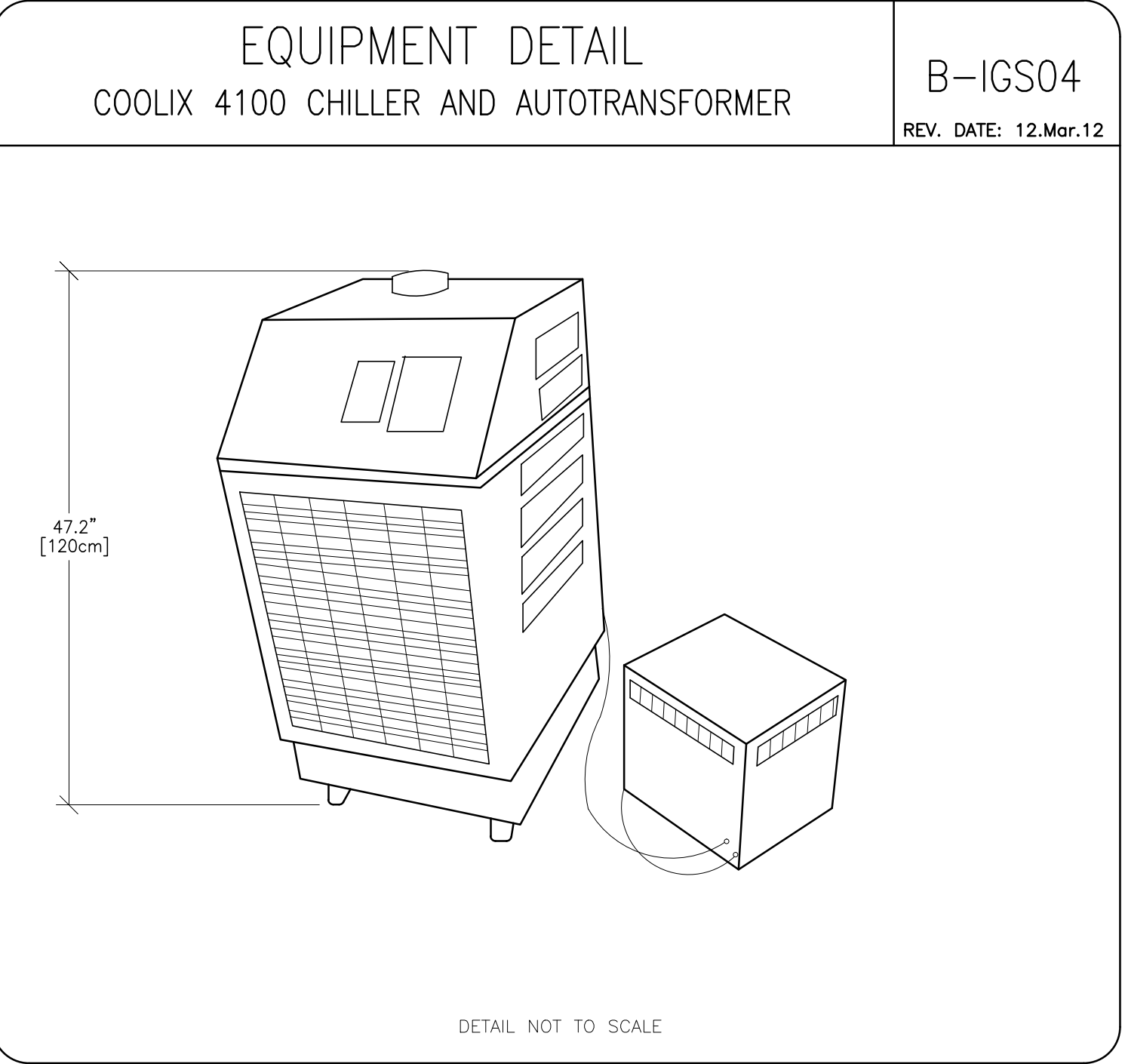
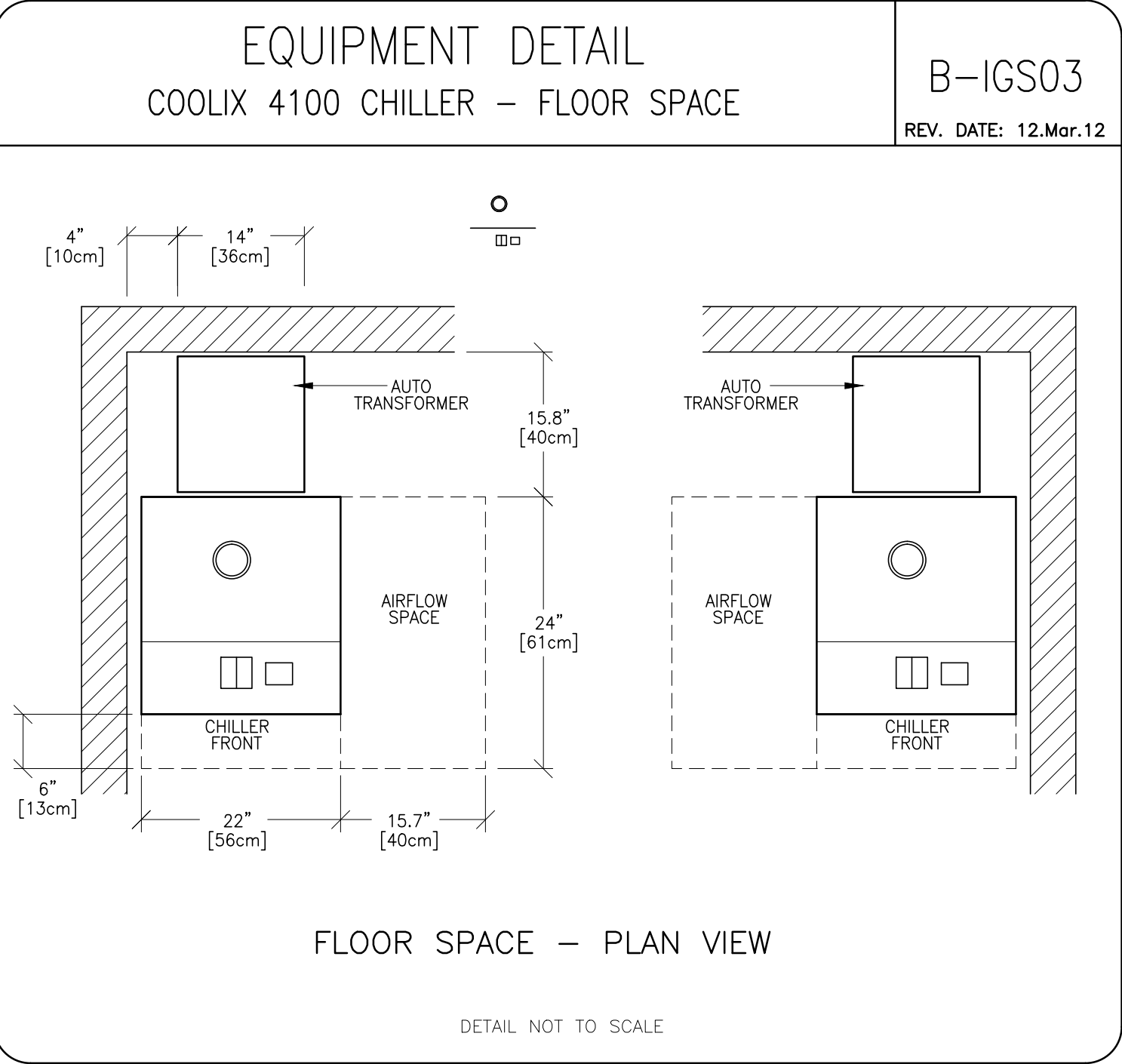
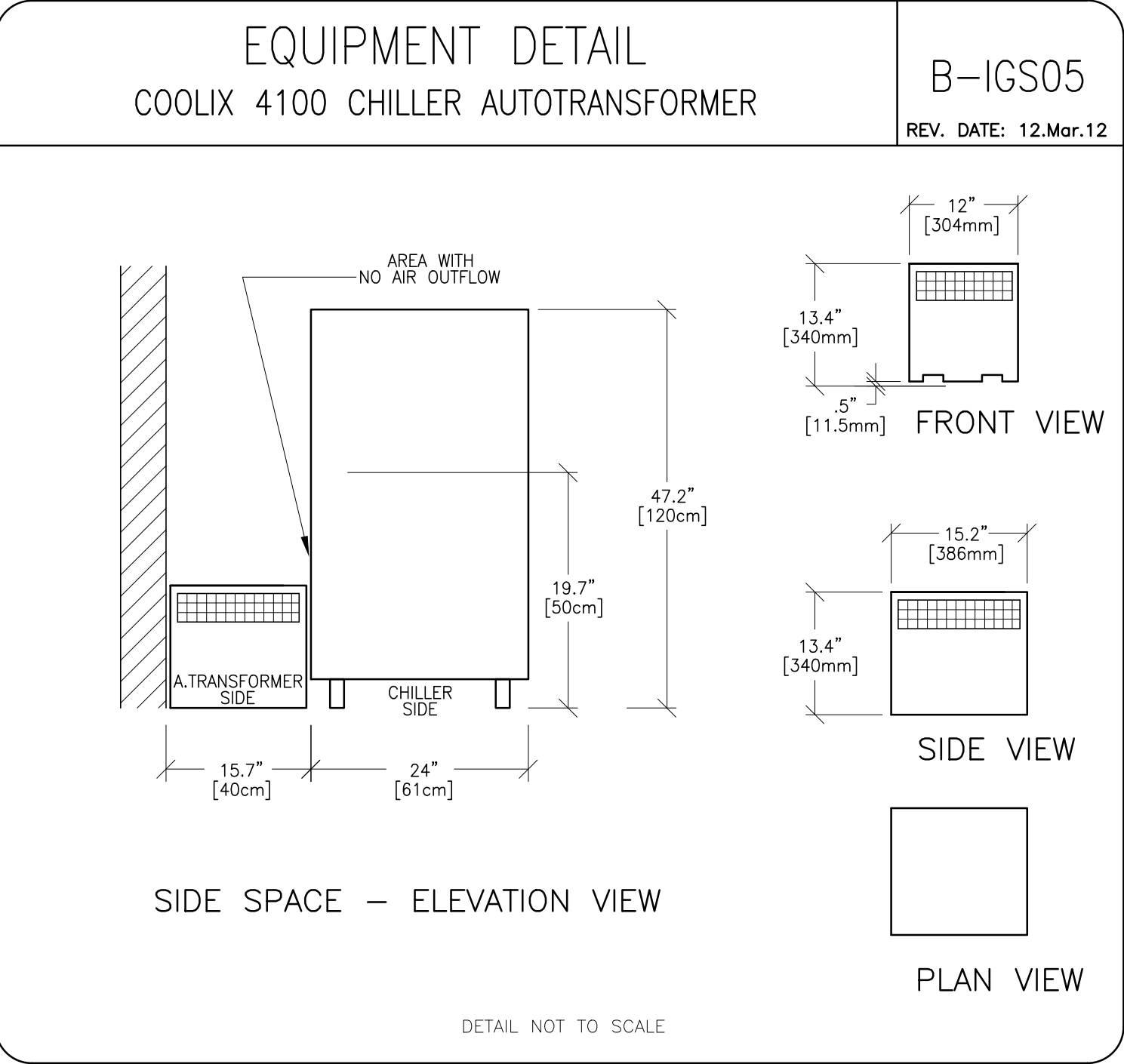
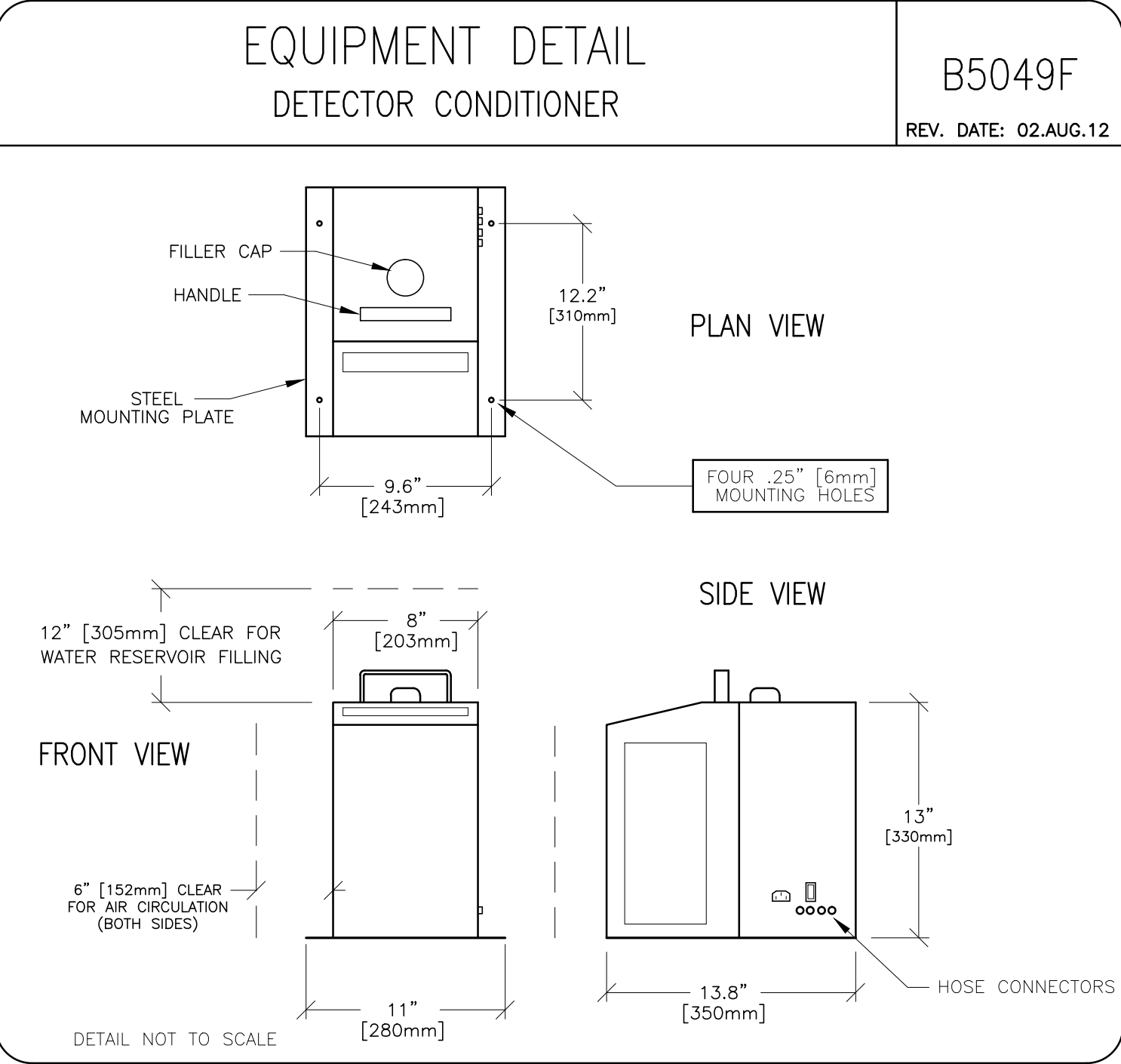
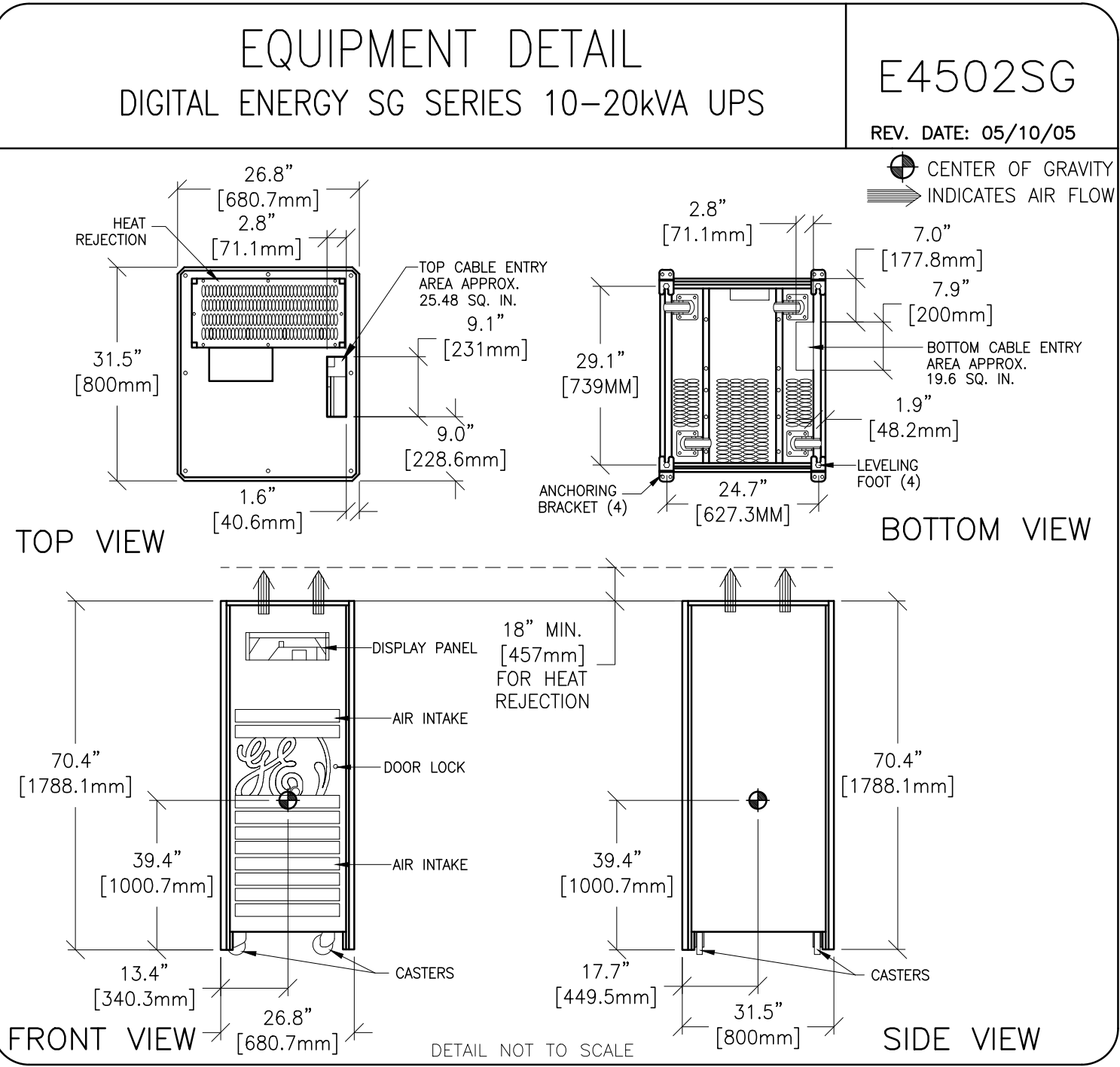
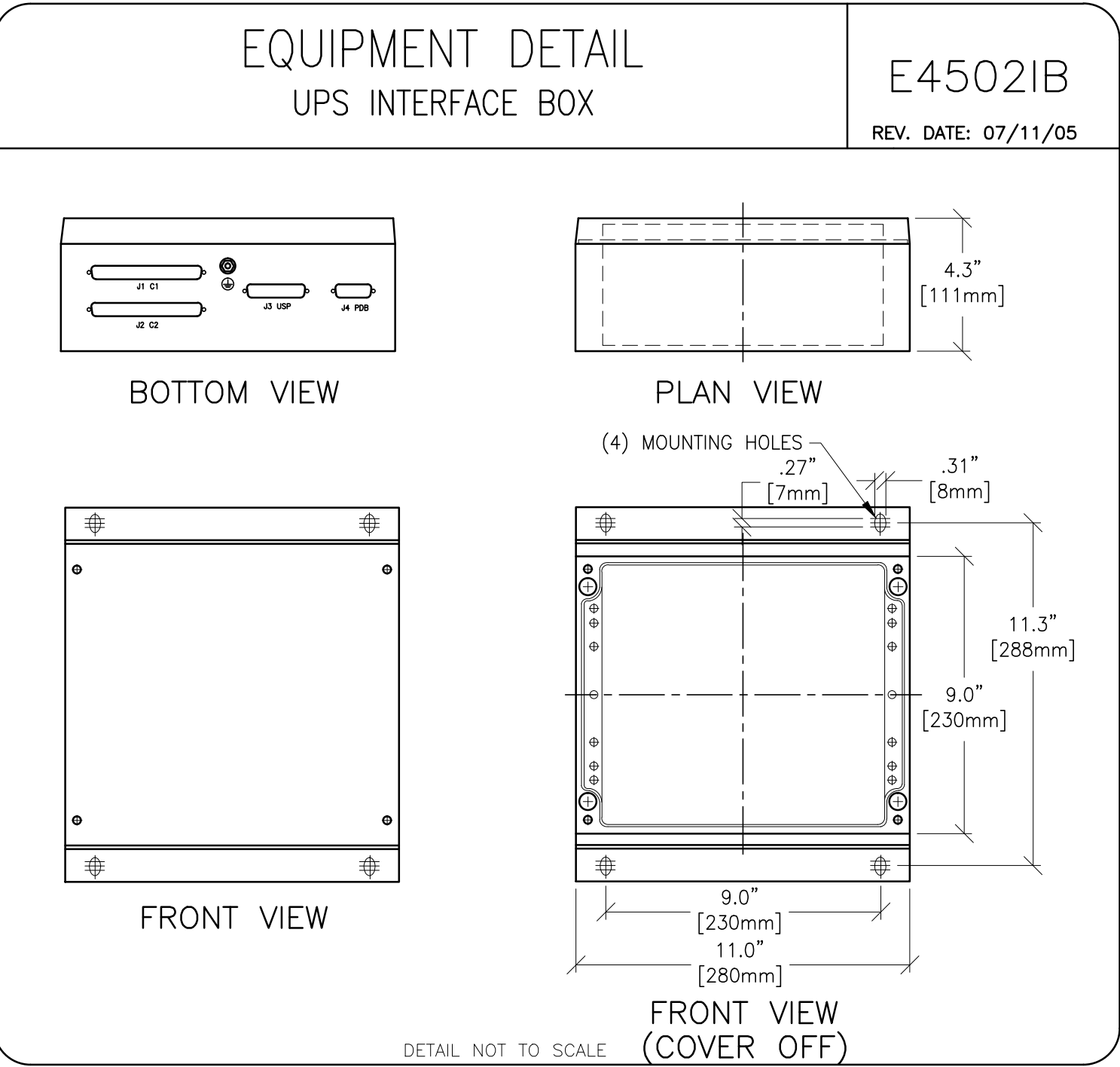
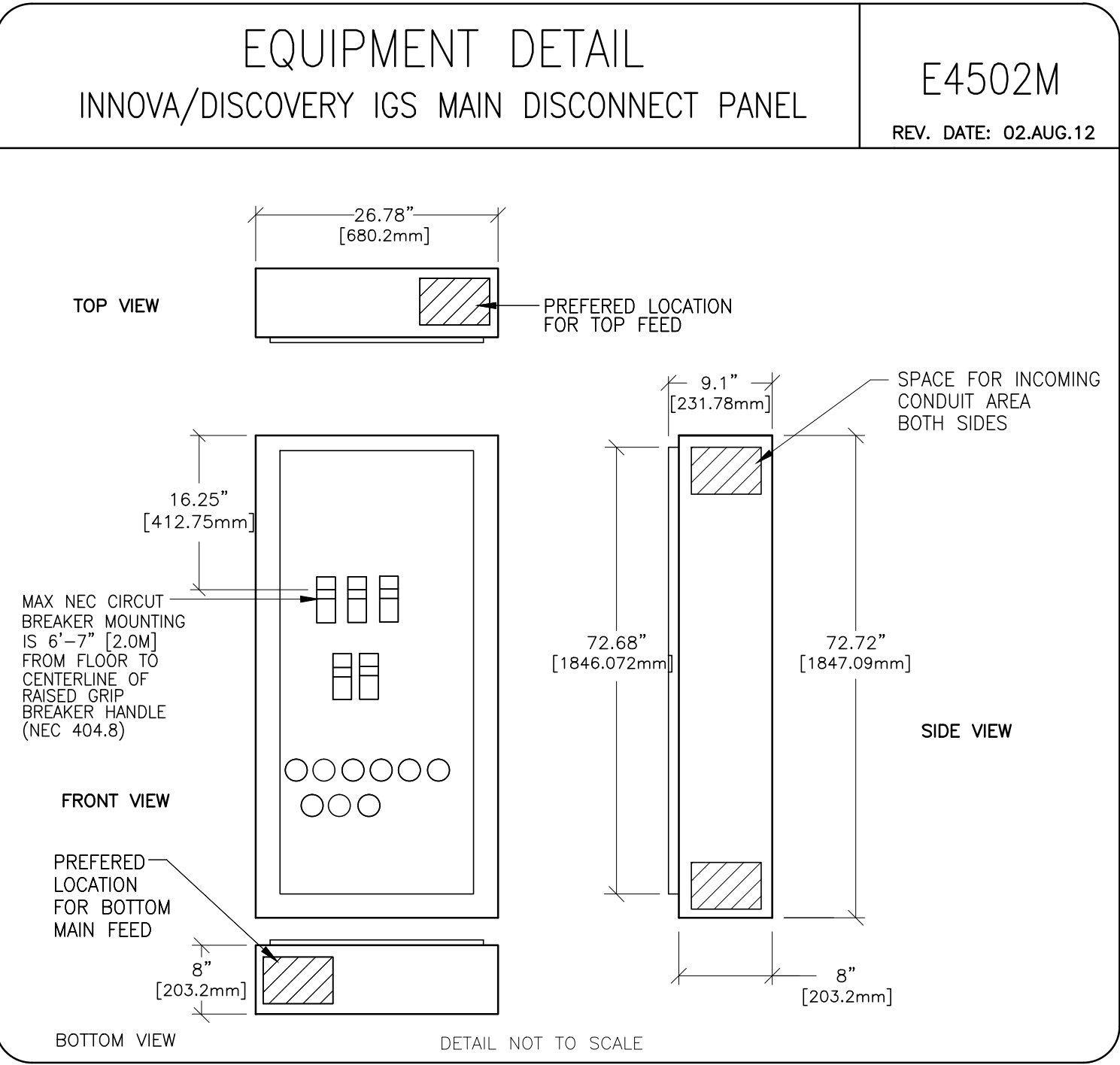
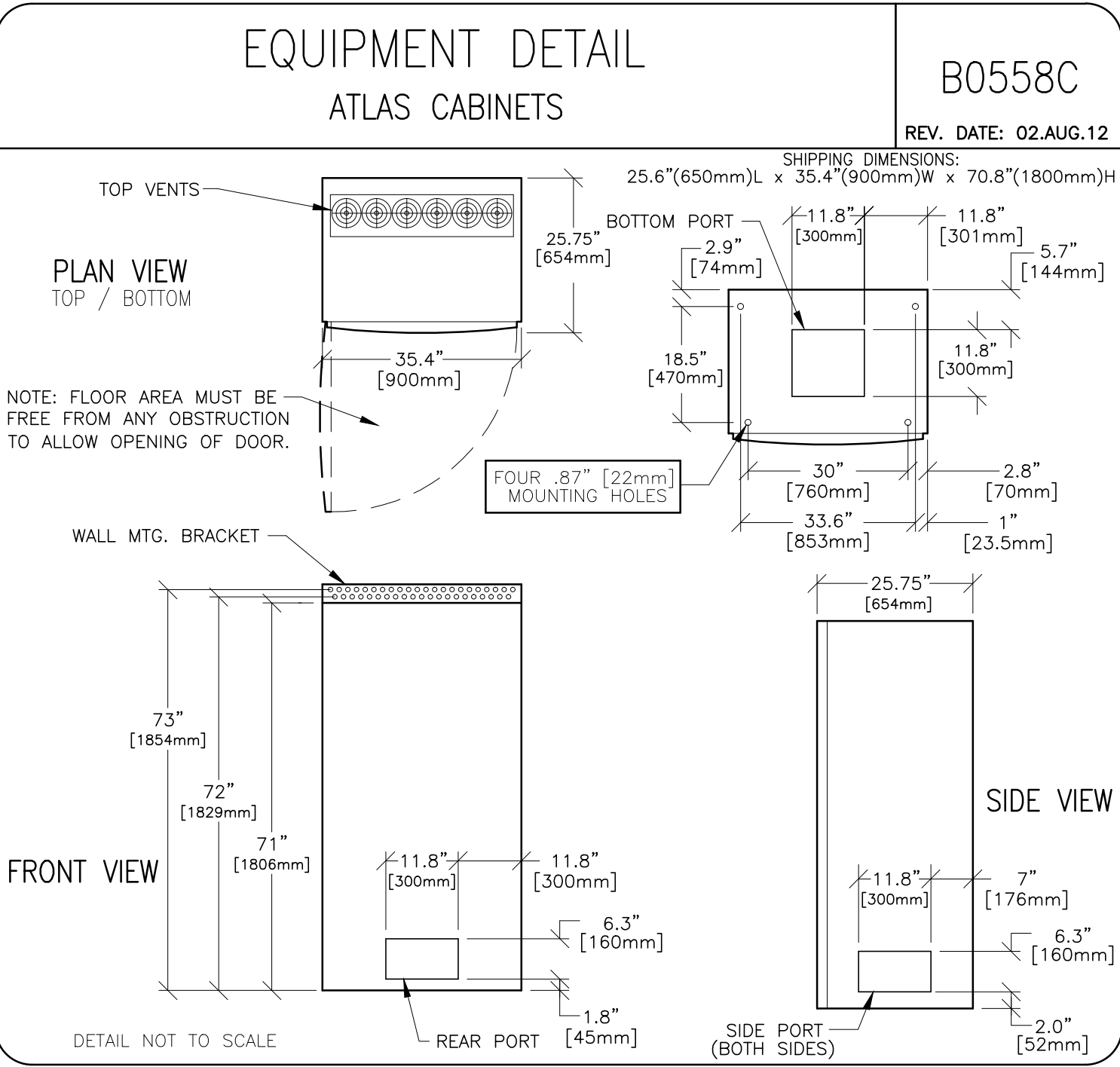
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SHEET

E4

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GE Healthcare

Healthcare Project Implementation - Design Center Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: INNOVA IGS 520

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PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

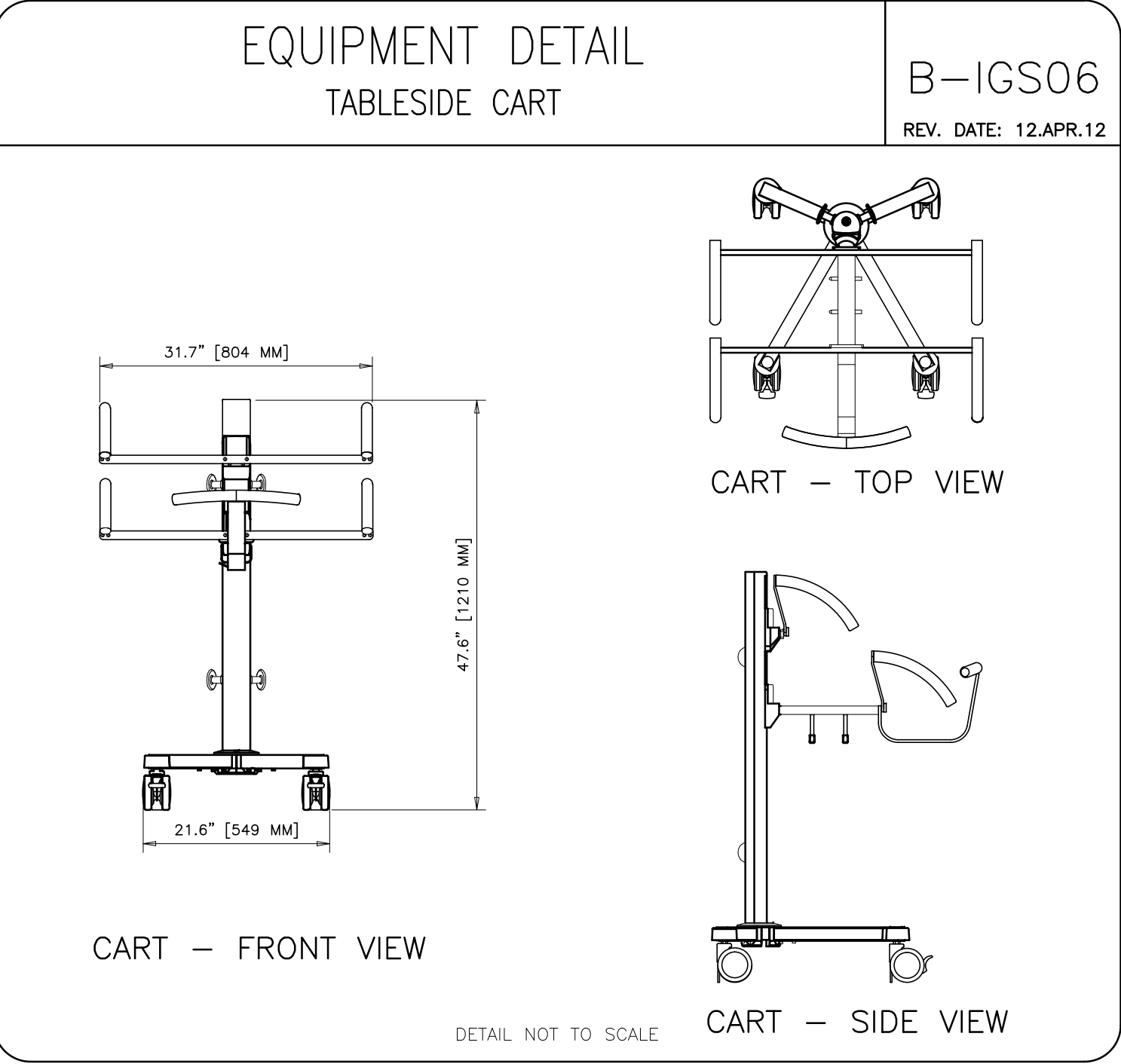
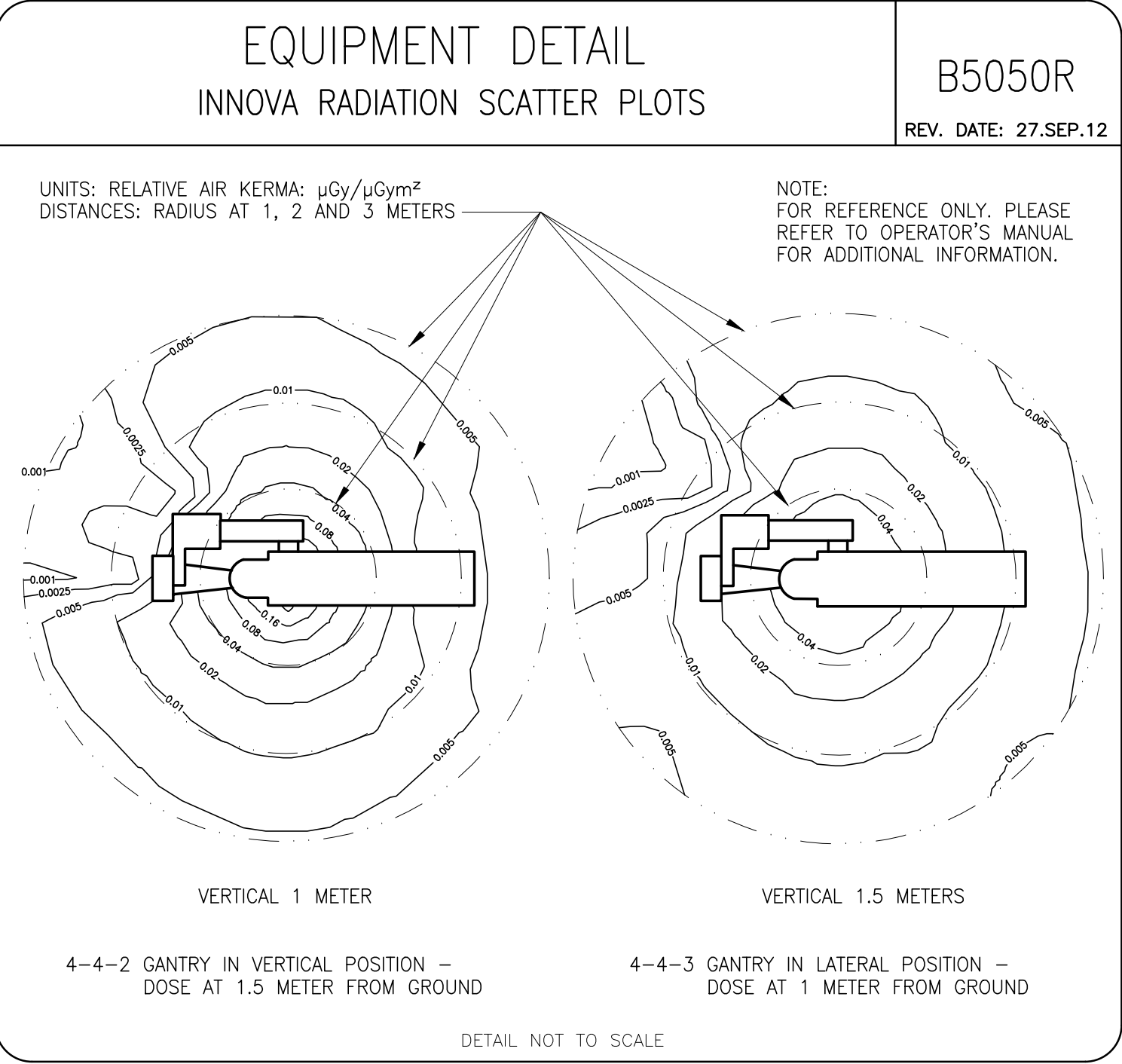
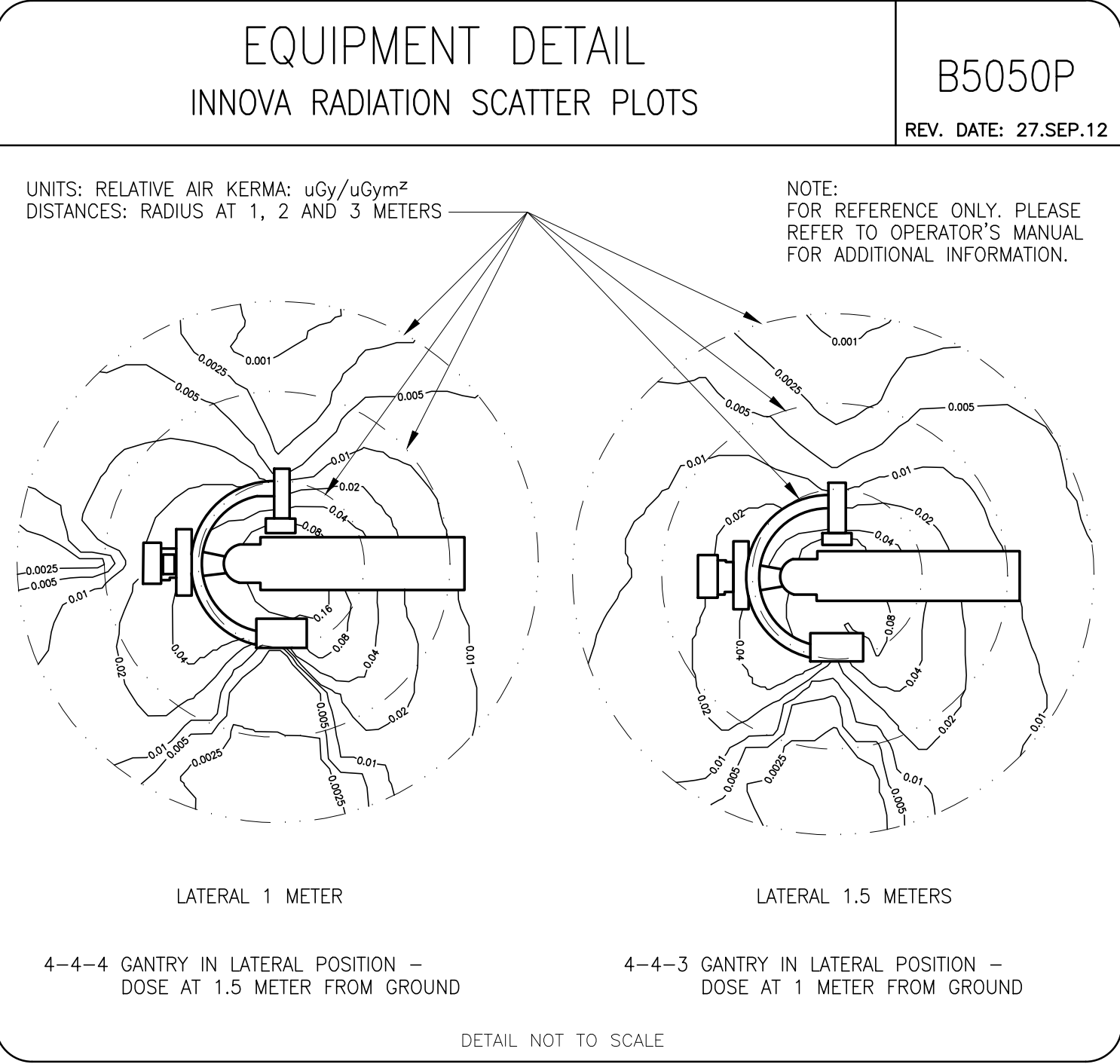
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SHEET

D1

THIS drawing is based on Sketch No.: 14NW1270



This drawing is based on Sketch No.: 14NWT270

PIM R2

RQ - 144741

PROJECT TITLE:

V A PALO ALTO
PALO ALTO, CALIFORNIA

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: INNOVA IGS 520

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D3